PHILOSOPHICAL

TRANSACTIONS

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PART I.

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MDCCCXXVI.

PHILOSOPHICAL

TRANSACTIONS.

Observations of the apparent distances and positions of 458 *double and triple Stars, made in the years* 1823, 1824, *and* 1825; *together with a re-examination of* 36 *Stars of the same description, the distances and positions of which were communicated in a former Memoir.* *By* JAMES SOUTH, *Esq. F. R. S.*

Read November 17, 1825.

THE Royal Society having honoured the observations of 380 double and triple stars made by Mr. HERSCHEL and myself with a place in the Philosophical Transactions, I am induced to offer for the like distinction a fresh series.

The Equatorial Instruments and Micrometers used on the present occasion, being precisely the same as those with which the preceding observations were made, the prefatory matter attached to the former communication, will be generally applicable to this.

As however some of the results have been obtained in England, and others in France, the place where each series of measures was procured, accompanies the date and instrument of observation.

From the 3rd of April, 1825, to the demolition of the Observatory at Passy, the micrometer of the Five-feet Equatorial was applied to the Seven-feet Instrument, in order to

2 76 97

obtain the advantage of higher magnifying powers. By this change they stand in order 92, 157, 181, 327, 413, 513, and 787; the commonly used power being 181: a rigorous examination assured me, that the value of the one micrometer, was also the value of the other.

In the subsequent pages will be found observations of about 160 double and triple stars, hitherto (as far as I know) undiscovered: their apparent right ascensions and declinations are, I hope, generally accurate to the nearest minute: and should occasionally a greater error be detected, some indulgence will I trust be extended to me, for they were generally found at a considerable distance from the meridian, when extreme unsteadiness of the stars, and unwillingness to quit my observatory, rendered sweeping for new double stars my only mode of passing the night in it: as however they have been found on subsequent evenings from the data here given, no difficulty in identifying them, can reasonably be expected.

In the former Paper, 37 double and triple stars were selected as entitled to peculiar notice, these it was my intention to have subjected individually to a rigid investigation; owing however to the almost unprecedented bad weather of the last autumnal and winter months, so only of them could be re-measured; and the observations, which are here subjoined as an Appendix, although not so complete* as I could have wished, will still I hope be deemed not unimportant.

The arrangement is somewhat different from that pursued on the former occasion: instead of individual measures being

* The Appendix contains observations of thirty-six stars; *six* however of them offer no particular interest, and were measured inadvertently, under an idea that they were *un*-measured stars.

presented to public view, the mean result of each night's work is here noted; but as the number of observations, and the differences between the extreme measures of each series are also specified, it is hoped that the alteration will be satisfactory to the Society.

As in these observations I have not had the powerful aid of Mr. HERSCHEL, it has been my endeavour as far as possible to compensate for the loss; hence, instead of taking *ten* individual observations both of distance and position on the *same* night, and thereby considering the star measured, I have divided the work generally assigned to each star between two evenings, the better to correct any error which unfavourable state of atmosphere, inaccurate micrometrical readings, or particular bias of judgment might entail; and when the results have exhibited discordances greater than seemed justified by the difficulty of the observations, a third, or even a fourth night's determination has been found useful.

To the observations contained in the former Memoir, peculiar interest was attached by the comparison of them with the results obtained by other astronomers; of which by far the most important were those derived from the labours of Sir W. HERSCHEL; but as the observations which are recorded in the Philosophical Transactions are (from circumstances before * adverted to) of themselves inadequate to furnish the final results arrived at by that illustrious astronomer, it is grateful to me, and doubtless will also be to the Society, that the kindness of Mr. HERSCHEL has supplied the necessary information; thus the existence of fresh connected systems is substantiated, and a degree of *present* importance conferred on the following pages, which he alone could bestow.

* See Phil. Trans. for 1824, Part III. page 20.

The noble liberality of the Russian Government having recently put Mr. STRUVE in possession of an instrument much more powerful, and far more appropriate, for pursuing this department of astronomical* enquiry, than those with which his published observations were made, I have not deemed it right, as heretofore, to refer to his earlier, yet still valuable determinations, the general accuracy of which may well be cited as proofs of what industry and perseverance may achieve, although supported by comparatively slender instrumental assistance.

I have said that the accompanying observations were made partly at home, and partly abroad; the latter remind me of a pleasing duty:—the Board of Longitude of Paris, and Government of France, have claims upon me too great to remain unnoticed, the one for having requested, and the other for having acceded to me the permission of introducing into France, free of all duty (*sans conditions*), whatever astronomical instruments I thought proper;† and so effectual were the arrangements of the Director General of the

* The investigation of parallax by direct observations of double stars, not having yet been seriously entered upon, although recommended by Sir W. HERSCHEL nearly fifty years ago, and the importance of it having been warmly pressed upon me by MONSIEUR LE MARQUIS DE LA PLACE—a continuous series of observations of the most interesting double and triple stars seeming necessary—and fresh determinations of the orbits of Saturn's satellites being wanted—it was my wish to have procured more extensive means than I possess, to have attacked the one, to have with greater facility followed up the other, and to have furnished the necessary observations of the satellites alluded to;—the overtures however for an object-glass of twelve inches diameter, and twenty feet focal length (Paris measure), with which I had proposed to construct an equatorial, similar to that of which an engraving is given in the former paper, were most unexpectedly arrested *in limine*, by Mr. FRAUNHOFER declining to supply me with one, unless accompanied by apparatus provided by himself—a *useless augmentation* of expence, which prudence therefore did not authorize me, to incur.

† The like indulgence was granted me for the importation of my ordinary baggage, travelling carriage, and for whatever I deemed necessary to render my sojourn in France comfortable.

Douanes, Mons. le Marquis de VAULCHIER, and so extreme the politeness of the principal and subordinate officers of the Customs at Calais, that the importation and exportation of them, were affairs, not of difficulty, but of gratification.

It is needless to state, that on the establishment of an observatory by a private individual in a foreign country, many difficulties must be encountered. To Mons. BENJAMIN DELESSERT, whose liberality in promoting every thing which has science for its aim knows no bounds, I stand indebted, amongst other things, for whatever comfort my observatory afforded.

From the members of the Royal Academy of Sciences of Paris I uniformly received every possible attention, whilst to Messrs. DE LA PLACE, ARAGO, BOUVARD, HUMBOLDT, and POISSON, a residence of fifteen months has placed me under obligations of no common order: they were *received* with PRIDE, and are *remembered* with GRATITUDE.

The Society have now before them, with few exceptions, a re-examination of all the identified double and triple stars described by Sir W. HERSCHEL in the Philosophical Transactions; with the sentiments therefore of the illustrious author of the *Mécanique Céleste* I will conclude—"Had the labours of Sir W. HERSCHEL been confined to this department of astronomy, the discoveries he has made in it would have alone conferred upon him an imperishable name."

JAMES SOUTH.

Passy; Rue Franklin, No. 19,
Oct. 22, 1825.

No. CCCLXXXI. R. A. $0^h\ 0^m$; Decl. 45° 23′ N.

51 (BODE) Andromedæ; STRUVE, 1; II. 83.

Double; 9th and 10th magnitudes.

Passy; October 19, 1824; Seven-feet Equatorial.

Position = 3° 24′ *nf* | 5 Obs. | Diff. = 3° 22′
Distance = 5″.710 | 5 Obs. | Diff. = 1″.106
} Extremely difficult.

Night favourable.

Passy; November 16, 1824; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 3° 49′ *nf* | 5 Obs. | Diff. = 3° 12′
Distance = 4″.371 | 5 Obs. | Diff. = 1″.178
} Extremely difficult.

Passy; September 27, 1825; Seven-feet Equatorial.

9th and 11th magnitudes.

Position = 4° 32′ *nf* | 5 Obs. | Diff. = 1° 40′
Distance = 5″.011 | 5 Obs. | Diff. = 0″.312
} Extremely difficult. (SOUTH.)

Position = 5° 45′ *nf* | 5 Obs. | Diff. = 1° 35′
Distance = 5″.087 | 5 Obs. | Diff. = 0″.649
} Excessively difficult. (Capt. BEAUFORT.)

Passy; September 28, 1825; Seven-feet Equatorial.

9th and 11th magnitudes.

Position = 5° 47′ *nf* | 5 Obs. | Diff. = 2° 15′
Distance = 4″.867 | 5 Obs. | Diff. = 0″.408
} Excessively difficult.

Mean Result.

Position 4° 39′ *nf* (25 Obs.); Distance 5″.009 (25 Obs.)

Epoch 1825.29.

There is no evidence of any change in the relative situation of these stars. Sir W. HERSCHEL'S observations give 5° 48′ *nf* for the position, Feb. 26, 1783, and 6° 44′ *nf* on Sept. 1, 1802; neither differing more than 2° 5′ from the present position. The distance also remains unaltered. (H.)

No. CCCLXXXII. R. A. $0^h\ 5^m$; Decl. 61° 49′ N.

STRUVE, 3; 1789; 214.

Double; 8th and 8½ magnitudes.

Passy; October 21, 1824; Seven-feet Equatorial.

Position = 85° 37′ *sf*	5 Obs.	Diff. = 1″.44	. . . . .
Distance = 18″.112	5 Obs.	Diff. = 1″.130	

Passy; November 16, 1824; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 86° 4′ *sf*	5 Obs.	Diff. = 0° 56′	. . . . .
Distance = 18″.263	5 Obs.	Diff. = 0″.721	

Mean Result.

Position 85° 50′ *sf*; Distance 18″.187; Epoch 1824.83.

No. CCCLXXXIII. R. A. $0^h\ 9^m$; Decl. 15° 32′ N.

Nova;

Double; 9th and 11th magnitudes.

Passy; September 15, 1825; Seven-feet Equatorial.

Position = 40° 58′ *sp*	5 Obs.	Diff. = 1° 42′	Excessively difficult.
Distance = 12″.209	5 Obs.	Diff. = 0″.601	

The small star scarcely bears any illumination.

Passy; October 12, 1825; Seven-feet Equatorial.

9th and 11th magnitudes.

Position = 38° 30′ *sp*	5 Obs.	Diff. = 1° 39′	Excessively difficult.
Distance = 11″.991	5 Obs.	Diff. = 0″.601	

Observed on the meridian with 157. Night fine.

Mean Result.

Position 39° 44′ *sp*; (10 Obs.); Distance 12″.100 (10 Obs.)
Epoch 1825.74.

No. CCCLXXXIV. R. A. $0^h\ 10^m$; Decl. 37° 20′ N.

Struve, 6; V. 85.

Double; 7th and 12th, or 15th magnitudes.

Passy; October 19, 1824; Seven-feet Equatorial.

Position = 76° 36′ *nf* | 5 Obs. | Diff. = 0° 35′ } Excessively difficult.
Distance = 46″.080 | 5 Obs. | Diff. = 1″.226 }

Night very fine; but the small star will scarcely bear the least illumination.

Passy; November 25, 1824; Seven-feet Equatorial.

8th and 15th magnitudes.

Position = 77° 3′ *nf* | 5 Obs. | Diff. = 0° 55′ Excessively difficult.

All attempts to obtain measures of distance unsuccessful.

Passy; December 10, 1824; Seven-feet Equatorial.

7th and 12th, or 15th magnitudes.

Position = 76° 45′ *nf* | 5 Obs. | Diff. = 0° 45′ } Excessively difficult.
Distance = 44″.943 | 5 Obs. | Diff. = 0″.865 }

Passy; January 6, 1825; Seven-feet Equatorial.

7th and 12th, or 15th magnitudes.

Distance = 46″.520 | 3 Obs. | Diff. = 1″.154 Excessively difficult.

Mean Result

Position 76° 48′ *nf* (15 Obs.); Epoch 1824.90;
Distance 45″.744 (13 Obs.); Epoch 1824.92.

The position Jan. 16, 1783, was 79° 24′ *nf*, and according to a single measure taken by Sir W. H. Aug. 19, 1783, the distance was then 31″. The difference of 2° 36′ in angle affords no proof of change; but 15″ in a distance of 46″, or a third of the whole, is too great to be owing to error of observation, even when the difficulty of the star is considered. (H.)

No. CCCLXXXV. R. A. $0^h\ 16^m$; Decl. 31° 31′ N.

Nova;

Double; 10th and 11th magnitudes.

Passy; September 15, 1825; Seven-feet Equatorial.

Position = 81° 49′ *sf*	5 Obs.	Diff. = 1° 8′	Excessively difficult.
Distance = 5″.116	5 Obs.	Diff. = 0″.745	

Observations to be received with caution.

Passy; October 7, 1825; Seven-feet Equatorial.

10th and 11th magnitudes.

Position = 80° 21′ *sf*	5 Obs.	Diff. = 3° 19′	South.
Distance = 6″.035	5 Obs.	Diff. = 0″.913	
Position = 82° 5′ *sf*	5 Obs.	Diff. = 1° 5′	Capt. Beaufort.
Distance = 5″.756	5 Obs.	Diff. = 0″.986	

Measures deemed excessively difficult by both Observers.

Mean Result.

Position 81° 25′ *sf*; (15 Obs.); Distance 5″.636 (15 Obs.); Epoch 1825.74.

No. CCCLXXXVI. R. A. $0^h\ 23^m$; Decl. 27° 32′ N.

Nova;

Double; 9th and 9½ magnitudes.

Passy; December 29, 1824; Seven-feet Equatorial.

Position = 74° 47′ *nf*	5 Obs.	Diff. = 1° 28′	Difficult.
Distance = 42″.228	5 Obs.	Diff. = 0″.986	

Night fine, but neither star bears a good illumination.

Passy; January 6, 1825; Seven-feet Equatorial.

Equal; each of the 10th magnitude.

Position = 74° 22′ *sp* or *nf*	5 Obs.	Diff. = 0° 25′	Very difficult.
Distance = 42″.335	5 Obs.	Diff. = 1″.851	

Night favourable, but both stars very faint.

Mean Result.

Position 74° 34′ *sp* or *nf*; Distance 42″.281; Epoch 1825.00.

No. CCCLXXXVII. R. A. $0^h\ 26^m$; Decl. $17°\ 55'$ N.

Struve, 8; Hist. Cæl. 478.

Double; equal; each of the 10th or 11th magnitudes.

Passy; October 19, 1824; Seven-feet Equatorial.

Position $=37°\ 45'$ *sp* or *nf* | 5 Obs. | Diff.$=0°\ 38'$
Distance$=42''.786$ | 5 Obs. | Diff.$=1''.587$ } Extremely difficult.

Night very fine.

Passy; November 16, 1824; Seven-feet Equatorial.

11th and 11½ magnitudes.

Position $=38°\ 18'$ *sp* | 5 Obs. | Diff.$=0°\ 46'$
Distance$=42''.235$ | 5 Obs. | Diff.$=1''.923$ } Excessively difficult.

Stars steady; Evening favourable.

Mean Result.

Position $38°\ 1'$ *sp* or *nf*; Distance $42''.510$; Epoch 1824.83.

CCCLXXXVIII. R. A. $0^h\ 27^m$; Decl. $29°\ 1'$ N.

Struve, 9; Hist. Cæl. 307.

Double; 9th and 11th magnitudes.

Passy; October 23, 1824; Seven-feet Equatorial.

Position $=50°\ 27'$ *nf* | 5 Obs. | Diff.$=6°\ 18'$
Distance$=7''.988$ | 5 Obs. | Diff.$=1''.250$ } On the meridian.

The measures are so excessively difficult, that I have but little confidence in the results.

North preceding, in the field with this, is a faint double star of the 4th or 5th class; but it is not measurable with this instrument.

Passy; November 16, 1824; Seven-feet Equatorial.

9th and 11th magnitudes.

Position $=57°\ 32'$ *nf* | 5 Obs. | Diff.$=2°\ 7'$
Distance$=7''.040$ | 5 Obs. | Diff.$=1''.322$ } On the meridian.

Measures of such difficulty, that I consider them little else than approximations; the small star will not bear the slightest illumination; would be a proper object for Mr. Herschel's 20-feet Reflector.

No. CCCLXXXVIII. continued.

Passy; December 23, 1824; Seven-feet Equatorial.

9th and 12th magnitudes.

Position = 55° 4′ *nf*	5 Obs.	Diff. = 2° 35′	Excessively difficult.
Distance = 6″.069	5 Obs.	Diff. = 0″.553	

The small star scarcely bears any illumination; night at present favourable.

Mean Result.

(The observations of October 23 being rejected)
Position 56° 18′ *nf*; Distance 6″.554; Epoch 1824.88.

No. CCCLXXXIX. R. A. 0^h 38^m; Decl. 50° 27′ N.

78 (Bode) Cassiopeiæ; Struve, 14; I. 40.

Double; 8½ and 9th magnitudes; the small star does not bear a good illumination.

Passy; October 23, 1824; Seven-feet Equatorial.

Position = 55° 38′ *sf*	5 Obs.	Diff. = 2° 39′	Very difficult.
Distance = 3″.053	5 Obs.	Diff. = 0″.601	

Passy; November 16, 1824; Seven-feet Equatorial.

8½ and 9th magnitudes.

Position = 57° 7′ *sf*	5 Obs.	Diff. = 3° 50′	Extremely difficult.
Distance = 2″.236	5 Obs.	Diff. = 1″.106	

Passy; September 28, 1825; Seven-feet Equatorial.

8½ and 10th magnitudes.

Position = 59° 59′ *sf*	5 Obs.	Diff. = 1° 7′	Extremely difficult.
Distance = 2″.418	5 Obs.	Diff. = 0″.481	

Mean Result.

Position 57° 35′ *sf* (15 Obs.); Distance 2.″569 (15 Obs.); Epoch 1825.14.

Sir W. Herschel's position May 4, 1783, was 50° 30′ *sf*. His distance ¼ of a diameter, corresponding to about 2″ or 2″½. A slow change of position (+ 0°.170 per annum, direct or in the direction *nf sp*) is rendered the more probable in this star, as the earlier observation is marked "very exact." (H.)

No. CCCXC. R. A. $0^h\ 49^m$; Decl. 16° 38′ S.

STRUVE, 17; Hist. Cæl. 249.

Double; 9th and 10th magnitudes; both bluish, and do not bear a good illumination.

Passy; November 25, 1824; Seven-feet Equatorial.

Position = 58° 6′ *s p*	5 Obs.	Diff. = 3° 2′	Very difficult.
Distance = 7″.749	5 Obs.	Diff. = 0″.505	

Night unfavourable; and during the observations of position, very bad.

The weather being much improved, the instrument was again placed upon this star, and the following measures were obtained, the star being half an hour west of the meridian:

Position = 56° 2′ *s p* | 6 Obs. | Diff. = 1° 53′. Difficult.

Passy; November 29, 1824; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 57° 27′ *s p*	5 Obs.	Diff. = 2° 40′	Very difficult.
Distance = 7″.814	5 Obs.	Diff. = 0″.841	

The evening is now become so bad, that the observations are discontinued.

Mean Result.

Position 57° 7′ *s p* (16 Obs.); Distance 7.″781; Epoch 1824.90.

No. CCCXCI. R. A. $0^h\ 50^m$; Decl. 0° 11′ S.

STRUVE, 19; P. O. 251.

Double; 9th and 10th magnitudes; small, blue.

Passy; October 25, 1824; Seven-feet Equatorial.

Position = 24° 43′ *n p*	5 Obs.	Diff. = 1° 48′	Extremely difficult.
Distance = 19″.206	5 Obs.	Diff. = 1″.803	

Night unfavourable.

Passy; November 3, 1824; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 27° 4′ *n p*	5 Obs.	Diff = 1° 6′	Very difficult.
Distance = 18″.888	5 Obs.	Diff. = 0″.553	

The small star is blue, and does not bear a good illumination.

No. CCCXCI. continued.

Passy; October 11, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 27° 34′ *n p* | 5 Obs. | Diff. = 1° 22′ } Excessively difficult.
Distance = 18″.504 | 5 Obs. | Diff. = 0″.481 }

Night foggy; the small star at times very faint.

Mean Result.

Position 26° 27′ *n p* (15 Obs); Distance 18″.866 (15 Obs.); Epoch 1825.17.

No. CCCXCII. R. A. 0h 56m; Decl. 6° 25′ S.

STRUVE, 21; III. 73.

Double; 10th and 12th, or 15th magnitudes.

Passy; October 30, 1824; Seven-feet Equatorial.

Position = 84° 22 *s f* | 5 Obs. | Diff. = 3° 5′ } Excessively difficult.
Distance = 12″.551 | 3 Obs. | Diff. = 1″.322 }

Observations liable to some inaccuracy; neither star bears sufficient illumination; night tolerably fine.

Passy; November 9, 1824; Seven-feet Equatorial.

10th and 15th magnitudes.

Position = 80° 7′ *s f* | 5 Obs. | Diff. = 2° 10′ } 20 minutes east of the meridian.
Distance = 13″.325 | 5 Obs. | Diff. = 0″.962 }

These measures were procured with such extreme difficulty, that I fear they deserve but little confidence; the night is rather hazy, and neither of the stars will bear the least illumination.

Passy; December 6, 1824; Seven-feet Equatorial.

10th and 15th magnitudes.

Distance = 12″.834 | 5 Obs. | Diff. = 1″.467. Excessively difficult.

The smaller star is now so extremely obscure, that no observations of position can be gotten.

No. CCCXCII. continued.

Passy; December 23, 1824; Seven-feet Equatorial.

10th and 12th magnitudes.

Position = 83° 37′ *sf* | 5 Obs. | Diff. = 0° 56′ } Extremely difficult.
Distance = 12″.724 | 5 Obs. | Diff. = 1″.298 }

Night fine, but the stars will not admit of sufficient illumination.

Mean Result.

Position 82° 42′ *sf* (15 Obs.); Epoch 1824.89;
Distance 12″.893 (18 Obs.); Epoch 1824.90.

The position and distance of 1783 are 89° 12′ *sp.* (Jan. 31), and 14″.82 (Aug. 21). A diminution of distance of 2″ in so difficult a star is not very material; but a change of 8° 6′ in the angle, accompanied by an alteration of the quadrant from *sp* to *sf* argues a sensible motion in one or both of these stars. (H.)

No. CCCXCIII. R.A. 0ʰ 56ᵐ; Decl. 31° 13′ N.

σ^2 Piscium; STRUVE, 23; V. 16.

Double; 6th and 15th magnitudes.

Passy; December 7, 1824; Seven-feet Equatorial.

Position = 21° 8′ ± *np* | 2 Obs. | Diff. = 0° 45′ Excessively difficult.
Distance about one minute and a half by estimation.

The small star bears no illumination, and the position here given may be one or two degrees in error.

The position in Nov. 1781 was stated at 15° 28′; but no reliance can be placed on this measure, and the evidence of change is open to great suspicion; indeed there may be some doubts as to the identity of the star. (H.)

No. CCCXCIV. R. A. $0^h\ 58^m$; Decl. $2°\ 41'$ S.

160 (Bode) Ceti; Struve, 28; Hist. Cæl. 392.

Double; 9th and 10th magnitudes.

Passy; October 25, 1824; Seven-feet Equatorial.

Position $= 58°\ 28'$ *np* | 5 Obs. | Diff. $= 6°\ 35'$ } Extremely difficult.
Distance $= 4''.159$ | 5 Obs. | Diff. $= 0''.336$ }

Night unfavourable.

Passy; November 3, 1824; Seven-feet Equatorial.

9th and 10th magnitudes.

Position $= 56°\ 11'$ *np* | 5 Obs. | Diff. $= 4°\ 48'$ } Extremely difficult.
Distance $= 4''.130$ | 5 Obs. | Diff. $= 0''.721$ }

Mean Result.

Position $57°\ 19'$ *np*; Distance $4''.144$; Epoch 1824.82.

No. CCCXCV. R. A. $1^h\ 3^m$; Decl. $31°\ 7'$ N.

Struve, 30; IV. 120.

Double; 8th and 9th magnitudes.

Passy; October 23, 1824; Seven-feet Equatorial.

Position $= 21°\ 37'$ *sp* | 5 Obs. | Diff. $= 0°\ 35'$ } Rather difficult.
Distance $= 18''.888$ | 5 Obs. | Diff. $= 0''.817$ }

Passy; November 9, 1824; Seven-feet Equatorial.

8th and 9th magnitudes.

Position $= 21°\ 50'$ *sp* | 5 Obs. | Diff. $= 2°\ 53'$ } Difficult.
Distance $= 19''.735$ | 5 Obs. | Diff. $= 0''.721$ }

Night unfavourable.

Passy: December 6, 1824; Seven-feet Equatorial.

8th and 9th magnitudes.

Distance $= 19''.495$ | 5 Obs. | Diff. $= 0''.673$. Rather difficult.

Mean Result.

Position $21°\ 43'$ *sp*; Distance $19'.373$ (15 Obs.); Epoch 1824.86.

This star is unchanged; the measures of 1783 differing from the present only $4°$ in position, and $-1''$ in distance. (H.)

No. CCCXCVI. R. A. $1^h\ 5^m$; Decl. 8° 38′ S.

STRUVE, 33; IV. 77.

Double; 8th and 15th magnitudes.

Passy; October 30, 1824; Seven-feet Equatorial.

Position = 67° 3′ *np*	3 Obs.	Diff. = 4° 30′	Excessively difficult.
Distance = 19″.163 ± single observation			

In these results I have but very little confidence; night tolerably good.

Passy; October 12, 1825; Seven-feet Equatorial.

8th and 15th magnitudes.

Position = 67° 53′ *np*	5 Obs.	Diff. = 2° 15′	Excesssively difficult.
Distance = 20″.036	5 Obs.	Diff. = 0″.721	

Observed on the meridian with 92; with 181 and 157 the small star could not be distinguished. Night favourable.

Mean Result.

Position 67° 34′ *np* (8 Obs.); Distance 19″.891 (6 Obs.); Epoch 1825.30.

The measures of 1783 are 63° 24′ *np* and 19 or 20″; neither giving ground to suppose a material change. (H.)

No. CCCXCVII. R. A. $1^h\ 9^m$; Decl. 63° 43′ N.

119 (BODE) Cassiopeiæ; STRUVE, 36.

Double; 8th and 9th magnitudes.

Passy; October 23, 1824; Seven-feet Equatorial.

Position = 83° 32′ *np*	5 Obs.	Diff. = 2° 29′	. . . . .
Distance = 50″.440	5 Obs.	Diff. = 1″.010	

Passy; November 15, 1824; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 82° 14′ *np*	5 Obs.	Diff. = 0° 27′	. . . . .
Distance = 50″.275	5 Obs.	Diff. = 0″.649	

Mean Result.

Position 82° 53′ *np*; Distance 50″.357; Epoch 1824.84.

No. CCCXCVIII. R. A. $1^h\ 19^m$; Decl. $7°\ 3'$ N.

Nova;

Double; 7th and 9th magnitudes.

Passy; December 29, 1824; Seven-feet Equatorial.

Position $=7°\ 54'\ sf$	5 Obs.	Diff. $=0°\ 57'$
Distance $=1'\ 9''.500$	5 Obs.	Diff. $=1''.010$

Passy; January 2, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position $=8°\ 41'\ sf$	5 Obs.	Diff. $=0°\ 26'$
Distance $=1'\ 10''.005$	5 Obs.	Diff. $=1''.202$

Observed when $1^h\ 50'$ west of the meridian.

Mean Result.

Position $8°\ 17'\ sf$; Distance $1'\ 9''.752$; Epoch 1825.00.

No. CCCXCIX. R. A. $1^h\ 33^m$; Decl. $12°\ 12'$ S.

χ' Ceti; STRUVE, 43; Hist. Cæl. 244.

Double; large, white; small, blue; 8th and $8\frac{1}{2}$ magnitudes; the small star does not bear a good illumination.

Blackman-street, December 12, 1823; Five-feet Equatorial.

Position $=0°\ 6'\ sf$	6 Obs.	Diff. $=2°\ 0'$	Extremely unsteady.
Distance $=3''.951$	5 Obs.	Diff. $=1''.010$	

Observed on the meridian; but night unfavourable.

Blackman-street; December 30, 1823: Seven-feet Equatorial.

8th and $8\frac{1}{2}$ magnitudes.

Position $=0°\ 15'\ nf$	5 Obs.	Diff. $=0°\ 10'$
Distance $=4''.436$	5 Obs.	Diff. $=0''.553$

Mean Result.

Position $0°\ 4'\ nf$; Distance $4''.193$; Epoch 1823.97.

No. CCCC. R. A. $1^h\ 34^m$; Decl. 7° 59′ S.

STRUVE, 44; Hist. Cæl. 247.

Double; 7th and $7\frac{1}{2}$ magnitudes.

Passy; November 15, 1824; Seven-feet Equatorial.

Position = 74° 41′ *sp* | 5 Obs. | Diff. = 1° 41′
Distance = 36″.749 | 5 Obs. | Diff. = 0″.817

Observed when 15 minutes west of the meridian.

Passy; November 16, 1824: Seven-feet Equatorial.

$7\frac{1}{2}$ and 8th magnitudes.

Position = 75° 23′ *sp* | 5 Obs. | Diff. = 1° 25′
Distance = 36″.542 | 5 Obs. | Diff. = 0″.697

Mean Result.

Position 75° 2′ *sp*; Distance 36″.645; Epoch 1824.87.

No. CCCCI. R. A. $1^h\ 40^m$; Decl. 21° 23′ N.

304 (BODE) Piscium; STRUVE, 45; I. 73.

Double; large, white; small, blue; 8th and 10th magnitudes.

Blackman-street, December 13, 1823; Seven-feet Equatorial.

Position = 82° 15 *sf* | 5 Obs. | Diff. = 3° 40′
Distance = 3″.412 | 5 Obs. | Diff. = 0″.601 — Very difficult.

Blackman-street; December 31, 1823; Seven-feet Equatorial.

Position = 82° 38′ *sf* | 5 Obs. | Diff. = 2° 35′
Distance = 3″.344 | 5 Obs. | Diff. = 0″.432 — Extremely difficult.

9th and 10th magnitudes.

Mean Result.

Position 82° 26′ *sf*; Distance 3″.378; Epoch 1823.98.

On Dec. 23, 1782 (1782-98) the position was 77° 24′ *sf*, being a change of + 5° 2′ in 41 years or + 0°.123 per annum. Future observations must decide on the reality of this motion. The distance seems to have undergone no alteration. (H.)

No. CCCCII. R. A. $1^h\ 42^m$; Decl. 36° 26′ N.

241 (Bode) Andromedæ; Struve, 46; I. 89.

Double; 9th and 10th magnitudes; large, white; small, blue, and bears only a very slight illumination.

Blackman-street; December 13, 1823; Seven-feet Equatorial.

Position = 71° 8′ *sf*	5 Obs.	Diff. = 1° 13′	Extremely difficult.
Distance = 4″.243	5 Obs.	Diff. = 0″.721	

Blackman-street; December 31, 1823; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 71° 36′ *sf*	5 Obs.	Diff. = 1° 55′	Excessively difficult.
Distance = 4″.652	5 Obs.	Diff. = 0″.601	

The small star is blue, and scarcely bears any illumination.

Passy; January 6, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 72° 3′ *sf*	10 Obs.	Diff. = 1° 39′	Extremely difficult.
Distance = 3″.878	5 Obs.	Diff. = 0″.481	

Night very fine, but the small star bears only a very feeble illumination.

Mean Result.

Position 71° 42′ *sf* (20 Obs.); Distance 4″.258 (15 Obs.); Epoch 1824.98.

The observations of Sir W. Herschel in 1783 and 1802 give respectively 75° 30′ *sf* and 67° 4′ *sf* for the positions of this star. The present position is almost exactly a mean of these, which renders it extremely probable that the star is subject to no material change. (H.)

No. CCCCIII. R. A. $1^h\ 45^m$; Decl. 27° 56′ N.

Nova;

Double; 8th and 10th magnitudes.

Passy; September 25, 1825; Seven-feet Equatorial.

Position = 75° 50′ *sf* | 5 Obs. | Diff. = 2° 40′
Distance = 5″.802 | 5 Obs. | Diff. = 0″.745 } South.

Position = 76° 8′ *sf* | 5 Obs. | Diff. = 2° 43′
Distance = 5″.961 | 5 Obs. | Diff. = 0″.529 } Capt. Beaufort.

Measures extremely difficult.

Passy; September 27, 1825; Seven-feet Equatorial.

9th and 11th magnitudes.

Position = 76° 23′ *sf* | 5 Obs. | Diff. = 6° 19′
Distance = 5″.597 | 5 Obs. | Diff. = 0″.769 } South.

Position = 75° 1′ *sf* | 5 Obs. | Diff. = 8° 5′
Distance = 5″.333 | 5 Obs. | Diff. = 0″.745 } Capt. Beaufort.

Measures excessively difficult.

Mean Result.

Position 75° 52′ *sf* (20 Obs.); Distance 5″.673 (20 Obs.);
Epoch 1825.74.

No. CCCCIV. R. A. $1^h\ 47^m$; Decl. 40° 30′ N.

Struve, 48; IV. 104.

Double; 8th and 10th magnitudes; small, blue.

Passy; November 15, 1824; Seven-feet Equatorial.

Position = 22° 55′ *sf* | 5 Obs. | Diff. = 2° 40′
Distance = 20″.628 | 5 Obs. | Diff. = 0″.673 } Difficult.

Night fine, but the small star is very faint.

No. CCCCIV. continued.

Passy; November 16, 1824; Seven-feet Equatorial.

8th and 12th magnitudes.

Position = 22° 16′ *nf*	5 Obs.	Diff. = 2° 51′	Very difficult.
Distance = 20″.553	5 Obs.	Diff. = 1″.250	

The small star is decidedly light blue; scarcely visible without illumination, but rendered much more distinct by a moderate one.

Mean Result.

Position 22° 35′ *nf*; Distance 20″.590; Epoch 1824.87.

This star appears subject to no change of position, as the angle of 1783 (22° 33′ *nf*) differs only 2′ from the present. An excess of 1″.64 in the present over the earlier measure of distance is not sufficient to authorize any positive conclusion. (H.)

No. CCCCV. R. A. 1^h 53^m; Decl. 78° 50″ N.

STRUVE, 52; 1789, 223.

Double; 7th and 7½ magnitudes.

Blackman-street; December 9, 1823; Five-feet Equatorial.

Position = 4° 15′ *np*	5 Obs.	Diff. = 0° 47′	. . . . .
Distance = 55″.370	5 Obs.	Diff. = 1″.516	

Blackman-street; December 30, 1823; Seven-feet Equatorial.

7th and 7½ magnitudes.

Position = 4° 8′ *np*	5 Obs.	Diff. = 0° 55′	. . . . .
Distance = 55″.237	5 Obs.	Diff. = 0″.962	

Mean Result.

Position 4° 12′ *np*; Distance 55″.303; Epoch 1823.97.

No. CCCCVI. R. A. $1^h\ 59^m$; Decl. 25° 5′ N.

14 Arietis; STRUVE, 56; VI. 69.

Double; large, white; small, blue; 6th and 10th magnitudes.

Blackman-street; December 9, 1823; Five-feet Equatorial.

Position = 8° 7′ *n p*	5 Obs.	Diff. = 1° 5′	}	Difficult.
Distance = 1′ 45″.349	5 Obs.	Diff. = 2″.020	}	

Stars very steady; but the evening hazy.

Blackman-street; December 30, 1823; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = 7° 49 *n p*	5 Obs.	Diff. = 0° 32′	} . . . . .
Distance = 1′ 45″.167	5 Obs.	Diff. = 0″.529	}

Mean Result.

Position 7° 58′ *n p*; Distance 1. 45″.258; Epoch 1823.97.

The position and distance of this star in 1783 are stated at 11° 12′ *n p* and 1′ 29″ 28‴. The change of position is not material; but with respect to the increase of distance, it may be remarked once for all, that there is great reason to suspect a considerable instrumental error in all the measures of that early period, exceeding 40″, the result being constantly (or most commonly) in defect, and that not unfrequently to a very large amount. The cause probably lies in the construction of the micrometer used;* and its effect is to throw a great uncertainty on the earlier distances of all stars of the 5th and 6th classes. Fortunately these are the least replete with interest. (H.)

* It is certainly not from a wrong determination of its scale.

No. CCCCVII. R. A. $2^h\ 0^m$; Decl. 1° 18′ S.

STRUVE, 57; Hist. Cæl. 392.

Triple; A of the 8th; B of the 9th; and C of the 8th magnitudes.

The star B is decidedly blue, and bears a tolerable illumination.

Measures of AB.

Passy; November 25, 1824; Seven-feet Equatorial.

Position = 20° 22′ *sp*	5 Obs.	Diff. = 2° 2′	. . . . .
Distance = 5″.008	5 Obs.	Diff. = 0″.937	

Passy; December 7, 1824; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 18° 41′ *sp*	5 Obs.	Diff. = 2° 15′	. . . . .
Distance = 4″.905	5 Obs.	Diff. = 0″.962	

Measures of AC.

Passy; November 25, 1824; Seven-feet Equatorial.

8th and 8th magnitudes.

Position = 12° 57′ *np* or *sf*	5 Obs.	Diff. = 0° 29′	. . . .
Distance = 4′ 3″.586	5 Obs.	Diff. = 0″.673	

Passy; December 7, 1824; Seven-feet Equatorial.

Equal; each of the 8th magnitude.

Position = 12° 40′ *np* or *sf*	5 Obs.	Diff. = 0° 15′	. . . . .
Distance = 4′ 4″.573	5 Obs.	Diff. = 1″.010	

Mean Result.

of AB. Position 19° 31′ *sp*; Distance 4″.956

of AC. ——— 12° 48′ *np* or *sf* ——— 4′ 4″.079

Epoch 1824.92.

No. CCCCVIII. R. A. $2^h\ 0^m$; Decl. 19° 28′ N.

STRUVE, 58; III. 68.

Double; 9th and 11th magnitudes; small, blue.

Passy; November 15, 1824; Seven-feet Equatorial.

Position = 60° 25′ *sf*	5 Obs.	Diff. = 1° 29′	Very difficult.
Distance = 8″.633	5 Obs.	Diff. = 0″.673	

The small star bears but the slightest illumination.

Passy; November 16, 1825; Seven-feet Equatorial.

9th and 12th magnitudes.

Position = 57° 13′ *sf*	5 Obs.	Diff. = 1° 57	Extremely difficult.
Distance = 9″.271	5 Obs.	Diff. = 0″.529	

The accuracy of these results perhaps a little questionable; the smaller star does not admit of the least illumination.

Mean Result.

Position 58° 49′ *sf*; Distance 8″.952; Epoch 1824.87.

In 1783 the measures of this star were, Position 55° 42′ *sf*; Distance 8″ 5‴; so that no material change in it has taken place. (H.)

No. CCCCIX. R. A. $2^h\ 5^m$; Decl. 56° 41′ N.

χ Persei; STRUVE, 65; VI. 19.

Double; 7th and 12th magnitudes.

Passy; December 8, 1824; Seven-feet Equatorial.

Position = 47° 33′ *sf*	3 Obs.	Diff. = 4° 26′	Excessively difficult.

The small star will bear no illumination; measures of distance cannot be procured; night not very favourable.

No. CCCCIX continued.

Passy; December 18, 1824; Seven-feet Equatorial.

6th and 12th magnitudes.

Position = 46° 6′ *sf*	5 Obs.	Diff. = 0° 58′	Extremely difficult.
Distance = 2′ 4″.703	5 Obs.	Diff. = 1″.202	

The small star will bear but the slightest illumination.

Passy; January 6, 1825; Seven-feet Equatorial.

7th and 12th magnitudes.

Position = 46° 17′ *sf*	5 Obs.	Diff. = 0° 38′	Extremely difficult.
Distance = 2′ 4″.363	5 Obs.	Diff. = 1″.707	

Mean Result.

Position 46° 30′ *sf*; (13 Obs.); Epoch 1824.97;

Distance 2′ 4″.533; Epoch 1824-99.

No measures of this star are given by Sir W. HERSCHEL. (H.)

No. CCCCX. R. A. 2h 7m; Decl. 39° 27′ N.

STRUVE, 68; Hist. Cæl. 140.

Double; 8th and 9th magnitudes.

Blackman-street; December 9, 1823; Five-feet Equatorial.

Position = 20° 50′ *np*	5 Obs.	Diff. = 1° 59′	Faint, but very steady.
Distance = 11″.379	5 Obs.	Diff. = 0″.632	

Blackman-street; December 30, 1823; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 21° 2′ *np*	5 Obs.	Diff. = 1° 0′	. . . . .
Distance = 10″.822	5 Obs.	Diff. = 0″.505	

Mean Result.

Position 20° 56′ *np*; Distance 11″.100; Epoch 1823.97.

No. CCCCXI. R. A. 2h 14m; Decl. 66° 35′ N.

ι Cassiopeiæ; STRUVE, 71; I. 84; and III. 4.

Measures of AC.

Blackman-street; December 9, 1823; Five-feet Equatorial.

Position = 13° 13′ *sf*	5 Obs.	Diff. = 2° 35′	Extremely difficult.
Distance = 7″.059	5 Obs.	Diff. = 1″.263	

Small star is decidedly blue, and bears only an indifferent illumination; the large star may be suspected close double with 137; with 303 is seen as such; owing however to the unsteadiness of the stars, no measures of the close pair can be obtained.

No. CCCCXI. continued.

Measures of A C.

Blackman-street; January 31, 1824; Seven-feet Equatorial.

5th and 10th magnitudes.

Position = 16° 2′ *sf*	5 Obs.	Diff. = 1° 8′	}	Excessively difficult.
Distance = 8″.961	5 Obs.	Diff. = 1″.683	}	

Five-feet Equatorial.

Distance = 8″.262 | 5 Obs. | Diff. = 0″.962. Excessively difficult.

Passy; January 8, 1825; Seven-feet Equatorial.

5th and 10th magnitudes.

Position = 18° 33′ *sf*	6 Obs.	Diff. = 3° 30		Excessively difficult.
Position = 18° 33′ *sf*	6 Obs.	Diff. = 1° 8′	}	Extremely difficult.
Distance = 7″.867	5 Obs.	Diff. = 0″.505	}	

The first set of observations of position taken this evening were obtained with 179; it being however insufficient to separate distinctly the two stars A and B, the subsequent measures were procured with 273; the star C bears a very tolerable illumination; but the night having become unfavourable, no measures of AB can be gotten.

Passy; October 16, 1825; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = 17° 19′ *sf*	5 Obs.	Diff. = 2° 5′	}	Excessively difficult.
Distance = 7″.393	5 Obs.	Diff. = 0″.962	}	

Observed with 181. The close star B is distinctly seen, but no measures of it can be obtained, in consequence of extreme unsteadiness of the stars.

Mean Result.

Position 16° 52′ *sf*; (27 Obs.) Distance 7″.909 (25 Obs.)
Epoch 1824.71.

The position of the distant star C was stated in 1782 at 10° 37′ *sf*, and in 1804 at 18° 57′ *sf*. It is to be presumed that some mistake had been committed in the earlier measure. (H.)

No. CCCCXII. R. A. $2^h\ 17^m$; Decl. 16° 8′ S.

378 (Bode) Ceti; Struve, 72; III. 80.

Double; 8th and 12th magnitudes.

Passy; November 21, 1824; Seven-feet Equatorial.

Position = 22° 40′ *n p*. ± Single measure.

Excessively difficult. Night tolerably fine; but the star is not measurable.

Passy; November 25, 1824; Seven-feet Equatorial.

8th and 12th magnitudes.

Position = 22° 28′ *n p*. ± Single measure.

Night unfavourable; no more observations can be gotten.

Passy; December 10, 1824; Seven-feet Equatorial.

8th and 12th magnitudes.

Position = 22° 20′ *n p* | 5 Obs. | Diff. = 3° 18′ }
Distance = 12″.219 | 5 Obs. | Diff. = 0″.889 } Excessively difficult.

The small star becomes invisible under the slightest illumination.

Passy: December 23, 1824; Seven-feet Equatorial.

7th and 12th magnitudes.

Distance = 11″.190 | 5 Obs. | Diff. = 0″.360. Excessively difficult.

The small star, which is blue, will not bear the least illumination.

Mean Result.

Position 22° 24′ *n p* (7 Obs.); Epoch 1824.92;
Distance 11″.704 (10 Obs.); Epoch 1824.96.

The measures of 1783 are Pos. 22° 24′ *n p*; Dist. = 11″.3. The position not differing at all, and the distance only 4-tenths of a second from their present values,—a remarkable coincidence. (H.)

No. CCCCXIII. R. A. $2^h\ 22^m$; Decl. $0°\ 19'$ N.

STRUVE, 74; Hist. Cæl. 48.

Double; $7\frac{1}{2}$ and 8th magnitudes.

Blackman-street; December 12, 1823; Five-feet Equatorial.

Position $=53°\ 14'$ *sp*	5 Obs.	Diff. $=1°\ 5'$	Night unfavourable.
Distance $=14''.347$	5 Obs.	Diff. $=1''.105$	

Blackman-street; December 30, 1823; Seven-feet Equatorial.

Position $=53°\ 32'$ *sp*	5 Obs.	Diff. $=0°\ 38'$	. . . . .
Distance $=14''.318$	5 Obs.	Diff. $=0''.481$	

8th and $8\frac{1}{2}$ magnitudes.

Mean Result.

Position $53°\ 23'$ *sp*; Distance $14''.332$; Epoch 1823.97.

No. CCCCXIV. R. A. $2^h\ 22^m$; Decl. $17°\ 37'$ N.

Nova;

Double; 10th and 11th magnitudes.

Passy; October 16, 1825; Seven-feet Equatorial.

Position $=89°\ 11'$ *nf*	5 Obs.	Diff. $=2°\ 40'$	Excessively difficult.
Distance $=8''.446$	5 Obs.	Diff. $=0''.793$	

Observed when on the meridian with 157; with 181 the stars were scarcely visible when the field was unilluminated. Night foggy.

From this night till the 22nd of this month, when the observatory at this place was dismantled, I was prevented by a succession of bad weather from obtaining a second series of observations of this star.

No. CCCCXV. R. A. $2^h\ 31^m$; Decl. 18° 5′ N.

Nova;

Triple; A 9th, B 9¼, and C of the 12th or 13th magnitudes.

Passy; October 11, 1825; Seven-feet Equatorial.

Measures of A B.

Position = 28° 48′ *sf*	5 Obs.	Diff. = 2° 45′	Difficult.
Distance = 2″.875	5 Obs.	Diff. = 0″.288	

These stars bear but a very indifferent illumination.

Measures of A C.

Same date and Instrument.

Position = 31° 29′ *sp*	2 Obs.	Diff. = 0° 52′	Excessively difficult.
Distance = 1′ 6″.256	2 Obs.	Diff. = 0″.240	

The star C is so extremely indistinct, that the results must be regarded as mere approximations.

From this date till the 22nd of October, when the observatory was taken down, I could not obtain any observations of this star.

No. CCCCXVI. R. A. $2^h\ 31^m$; Decl. 39° 31′ N.

Struve, 78; IV. 64.

Triple; A of the 8th, B of the 9th, and C of the 5th magnitudes.

Measures of A B.

Blackman-street; December 20, 1823; Five-feet Equatorial.

Position = 61° 3′ *sp*	5 Obs.	Diff. = 1° 24′	. . . . .
Distance = 22″.534	5 Obs.	Diff. = 0″.885	

Measures of A C.

Same date and Instrument.

Position = 53° 56′ *sp*	3 Obs.	Diff. = 0° 10′	. . . . .
Distance = 4′ 26″.630	3 Obs.	Diff. = 0″.411	

C being to the south of A.

No. CCCCXVI. continued.

Measures of A B.

Blackman-street; December 30, 1823; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 59° 58′ *sp*	5 Obs.	Diff. = 2° 20′	Very difficult.
Distance = 23″.233	5 Obs.	Diff. = 0″.962	

The small star bears only a very feeble illumination.

Measures of A C.

Same date and Instrument.

9th and 5th magnitudes.

Position = 53° 51′ *sp*	3 Obs.	Diff. = 0° 42′	. . . . .
Distance = 4′ 25″.454	3 Obs.	Diff. = 0″.601	

The star C being to the south of the star A.

Mean Result.

of A B. Position 60° 30′ *sp*; Distance 22″.883

of A C. Position 53° 53′ *sp*; Distance 4′ 26″.042

Epoch 1823.99.

1783, March 8. Position of A B 57° 57′ *sp*; Distance 22″.0, giving no reason to suspect any sensible change in this star (H.)

No. CCCCXVII. R. A. 2^h 32^m; Decl. 55° 45′ N.

STRUVE, 80; Hist. Cæl. 371.

Double; 9½ and 10th magnitudes; the small star bears but the most feeble illumination.

Passy; December 18, 1824; Seven-feet Equatorial.

Position = 5° 48′ *np*	5 Obs.	Diff. = 0° 42′	Very difficult.
Distance = 16″.585	5 Obs.	Diff. = 1″.082	

No. CCCCXVII. continued.

Passy; January 6, 1825; Seven-feet Equatorial.

Equal, each of 9½ magnitude.

Position = 5° 53′ *n p* or *s f*	5 Obs.	Diff. = 3° 3′	Extremely difficult.
Distance = 16″.492	5 Obs.	Diff. = 0″.601	

Mean Result.

Position 5° 50′ *n p*; Distance 16″.538; Epoch 1824.99.

No. CCCCXVIII. R. A. 2ʰ 34ᵐ; Decl. 28° 41′ N.

Nova;

Double; 9th and 9½ magnitudes.

Passy; October 11, 1825; Seven-feet Equatorial.

Position = 25° 51 *n p*	5 Obs.	Diff. = 2° 9′	Extremely difficult.
Distance = 2″.606	5 Obs.	Diff. = 0″.408	

Observed when half an hour east of the meridian. Night foggy.

Passy; October 16, 1825; Seven-feet Equatorial.

9½ and 10th magnitudes.

Position = 22° 43 *n p*	5 Obs.	Diff. = 1° 30′	Excessively difficult.
Distance = 3″.200	5 Obs.	Diff. = 0″.192	

Observed on the meridian with 157. Night very hazy.

October 22nd. A succession of cloudy nights since the 16th has prevented me getting another series of observations: the measures are difficult; but the mean will I apprehend not prove very remote from the truth.

Mean Result.

Position 24° 17′ *n p* (10 Obs); Distance 2″.903; Epoch 1825.78.

No. CCCCXIX. R.A. $2^h\ 40^m$; Decl. 52° 15′ N.

85 (Bode) Persei; Struve, 84; I. 38.

Double; $9\frac{1}{2}$ and 10th magnitudes; very close.

Passy; January 6, 1825; Seven-feet Equatorial.

Position = 22° 28′ *np*	5 Obs.	Diff. = 3° 40′	Excessively difficult.
Distance = 1″.142	5 Obs.	Diff. = 0″.264	

Night extremely favourable; but unfortunately a considerable part (perhaps one-third) of the object-glass is rendered useless by the interference of the transverse timber, which connects the eastern and western sides of the observatory.

Passy; January 17, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 20° 10′ *np*	10 Obs.	Diff. = 4° 35′	Excessively difficult.
Distance = 1″.472	6 Obs.	Diff. = 0″.456	

Night very clear, but the stars unsteady.

Passy; January 19, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 21° 9′ *np*	10 Obs.	Diff. = 2° 42′	Excessively difficult.
Distance = 1″.320	5 Obs.	Diff. = 0″.601	

Observed with 273; night fine.

Mean Result.

Position 21° 1′ *np* (25 Obs.); Distance 1″.321 (16 Obs.); Epoch 1825.09.

The earlier measures of this star compared with the present offer a discordance. In 1783 the position was stated at 8° 24′ *np*; in 1804, by a mean of two measures agreeing well, 20° 34′ *np*. It is therefore probable that the first measure might be in error, which from the extreme closeness of the stars might well happen. It should be re-examined some years hence. (H.)

No. CCCCXX. R. A. $2^h\ 42^m$; Decl. 37° 36′ N.

20 Persei; STRUVE, 85; III. 60.

Double; 6th and 12th magnitudes; small, blue, and very faint, but unquestionably becomes more distinct by slight illumination.

Passy; November 21, 1824; Seven-feet Equatorial.

Position = 34° 2′ *sp*	5 Obs.	Diff. = 2° 46′	Very difficult.
Distance = 14″.049	5 Obs.	Diff. = 1″.298	

Passy; December 10, 1824; Seven-feet Equatorial.

6th and 12th, or 15th magnitudes.

Position = 33° 38′ *sp*	5 Obs.	Diff. = 1° 48′	Extremely difficult.
Distance = 13″.724	5 Obs.	Diff. = 0″.962	

Mean Result.

Position 33° 50′ *sp*; Distance 13″.886; Epoch 1824.91.

In 1783 the position was 30° 30′ *sp*, a measure which is confirmed by an observation in a 20-feet sweep in the same year, where it is stated at 30° *sp*. The distance 14″.03. There is therefore no evidence of material change in this star. (H.)

No. CCCCXXI. R. A. $2^h\ 46^m$; Decl. 43° 47′ N.

STRUVE, 86; Hist. Cæl. 121.

Double; 9th and 10th magnitudes; small, blue.

Passy; November 15, 1824; Seven-feet Equatorial.

Position = 26° 41′ *np*	5 Obs.	Diff. = 1° 57′	Very difficult.
Distance = 28″.153	5 Obs.	Diff. = 1″.178	

Night fine; but the small star bears only a very slight illumination.

Passy; November 16, 1824; Seven-feet Equatorial.

10th and 11th magnitudes.

Position = 26° 52′ *np*	5 Obs.	Diff. = 3° 18′	Extremely difficult.
Distance = 28″.070	5 Obs.	Diff. = 2″.717	

Mean Result.

Position 26° 46′ *np*; Distance 28″.411; Epoch 1824.87.

No. CCCCXXII. R. A. $2^h\ 48^m$; Decl. 51° 38′ N.

Struve, 87; P. II. 220; Hist. Cæl. 43.

Double; 6th and $6\frac{1}{2}$ magnitudes.

Blackman-street; December 12, 1823; Five-feet Equatorial.

Position = 3° 42′ *nf*	5 Obs.	Diff. = 1° 11′
Distance = 13″.135	5 Obs.	Diff. = 0″.316

Blackman-street; December 29, 1823; Seven-feet Equatorial.

7th and 8th magnitudes.

Position = 5° 38′ *nf*	5 Obs.	Diff. = 2° 35′	Night hazy.
Distance = 12″.786	5 Obs.	Diff. = 0″.745	

Mean Result.

Position 4° 40′ *nf*; Distance 12″.969; Epoch 1823.97.

No. CCCCXXIII. R. A. $2^h\ 49^m$; Decl. 25° 42′ S.

41 (Bode) Appar. Chemic; South's Catalogue.

Double; $8\frac{1}{2}$ and 9th magnitudes.

Passy; December 10, 1824; Seven-feet Equatorial.

Position = 51° 2′ *sp*	5 Obs.	Diff. = 1° 5′	Satisfactory.
Distance = 27″.747	5 Obs.	Diff. = 0″.553	

Night very favourable.

Passy; December 18, 1824; Seven-feet Equatorial.

$8\frac{1}{2}$ and 9th magnitudes.

Position = 50° 42′ *sp*	5 Obs.	Diff. = 1° 13′	Rather difficult.
Distance = 27″.761	5 Obs.	Diff. = 0″.962	

Night at present not favourable.

Mean Result.

Position 50° 52′ *sp*; Distance 27″.754; Epoch 1824.95.

No. CCCCXXIV. R. A. $3^h\ 10^m$; Decl. 19° 8′ N.

STRUVE, 90; II. 76.

Double; $8\frac{1}{2}$ and 9th magnitudes.

Passy; November 15, 1824; Seven-feet Equatorial.

Position = 19° 0′ *sp* | 5 Obs. | Diff. = 2° 10′ } Difficult.
Distance = 7″.519 | 5 Obs. | Diff. = 0″.865 }

Passy; November 16, 1824; Seven-feet Equatorial.

9th and $9\frac{1}{2}$ magnitudes.

Position = 18° 53 *sp* | 5 Obs. | Diff. = 2° 20′. Difficult.
Distance = 6″.554 | 5 Obs. | Diff. = 0″.769. Very difficult.

Small star very obscure; both have a bluish tint.

Passy; February 4, 1825; Seven-feet Equatorial.

$8\frac{1}{2}$ and 9th magnitudes.

Distance = 7″.483 | 5 Obs. | Diff. = 0″.553. Satisfactory.

Set the micrometer to 29 parts, which with correction for Zero, are equal to the measure obtained on the 16th of November, and found it certainly too small.

Mean Result.

(The distance observed on November 16 being rejected)
Position 18° 56′ *sp*; Epoch 1824.87; Distance 7″.501; Epoch 1824.98.

Measures of 1782, Dec. 24; Position 15° 24′ *sp*; Distance 5″.80. These indicate a slight change in angle, and a pretty sensible one (— 1″.7) in distance, considering the closeness of the stars. (H.)

No. CCCCXXV. R. A. $3^h\ 12^m$; Decl. 29° 11′ N.

Nova;

Double; equal; each of the 9th magnitude.

Passy; October 11, 1825; Seven-feet Equatorial.

Position = 12° 18′ *sf* or *np* | 5 Obs. | Diff. = 0° 53′
Distance = 9″.844 | 5 Obs. | Diff. = 0″.360
} Extremely difficult.

Neither star bears a good illumination. Night foggy. Observed when 44 minutes east of the meridian.

Passy; October 16, 1825; Seven-feet Equatorial.

Equal; each of the 11th magnitude.

Position = 12° 19′ *np* or *sf* | 5 Obs. | Diff. = 3° 5′
Distance = 10″.846 | 5 Obs. | Diff. = 0″.240
} Excessively difficult.

With the common observing power of 181 the stars were not visible: the observations made on the meridian with 157. Night foggy.

October 22nd. The discordance between the two sets of distances is too considerable; between the 16th and this day however, the star has not been visible. The instruments are now dismounted.

Mean Result.

Position 12° 18′ *sf* or *np* (10 Obs.); Distance 10″.345 (10 Obs.); Epoch 1825.78.

No. CCCCXXVI. R. A. $3^h\ 18^m$; Decl. 19° 52′ N.

STRUVE, 92; III. 77.

Double; large, white; small, blue; 8th and 11th magnitudes.

Blackman-street; February 1, 1824; Seven-feet Equatorial.

Position = 75° 0′ *sf* | 5 Obs. | Diff. = 2° 15′
Distance = 8″.077 | 5 Obs. | Diff. = 0″.481
} Extremely difficult.

Night unfavourable.

Passy; November 16, 1824; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 72° 32′ *sf* | 5 Obs. | Diff. = 1° 12′
Distance = 7″.737 | 5 Obs | Diff. = 0″.529
} Extremely difficult.

The small star is very obscure; it is decidedly blue.

No. CCCCXXVI. continued.

Passy; January 8, 1825; Seven-feet Equatorial.

8th and 12th magnitudes.

Position = 71° 29′ *sf* | 4 Obs. | Diff. = 1° 59′. Excessively difficult.
Night too unfavourable for measures of distance.

Passy; February 4, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Distance = 7″.579 | 5 Obs. | Diff. = 0″.769. Extremely difficult.

Mean Result.

Position 73° 7′ *sf*; Epoch 1824.66 (14 Obs.);
Distance 7″.798; Epoch 1824.68 (15 Obs.)

The measures of Jan. 19, 1783, give Position 73° 18′ *sf*; Distance 8″.533; the former agreeing very exactly, and the latter pretty well with the present determinations. (H.)

No. CCCCXXVII. R. A. 3^h 21^m; Decl. 27° 6′ N.

STRUVE, 94;

Double; 7½ and 7¼ magnitudes.

Blackman-street; December 9, 1823; Five-feet Equatorial.

Position = 36° 39′ *sp* | 6 Obs. | Diff. = 0° 58′
Distance = 43″.472 | 5 Obs. | Diff. = 0″.979 . . . . . .

Blackman-street; December 29, 1823; Seven-feet Equatorial.

7th and 7½ magnitudes.

Position = 37° 35′ *sp* | 5 Obs. | Diff. = 0° 35′
Distance = 43″.678 | 5 Obs. | Diff. = 1″.058 . . . . . .

Mean Result.

Position 37° 7′ *sp*; Distance 43″.575; Epoch 1823.97.

No. CCCCXXVIII. R. A. $3^h\ 21^m$; Decl. 26° 57′ N.

STRUVE, 93;

Double; $6\frac{1}{2}$ and 7th magnitudes.

Blackman-street; December 9, 1823; Five-feet Equatorial.

Position = 0° 1′ *s p* | 5 Obs. | Diff. = 0° 35′
Distance = 11″.663 | 5 Obs. | Diff. = 1″.105 . . . . . .

Set the position wire to Zero, and both stars remained bisected by it, during their passage across the field.

Blackman-street; December 29, 1823; Seven-feet Equatorial.

8th and $8\frac{1}{2}$ magnitudes.

Position = 0° 50′ *n p* | 5 Obs. | Diff. = 1° 0′
Distance = 11″.685 | 5 Obs. | Diff. = 0″.120 Occasionally very faint.

Mean Result.

Position 0° 24′ *n p*; Distance 11″.674; Epoch 1823.97.

No. CCCCXXIX. R. A. $3^h\ 23^m$; Decl. 22° 45′ N.

STRUVE, 95; Hist. Cæl. 31.

Double; equal; each of $7\frac{1}{2}$ magnitude.

Blackman-street; December 20, 1823; Five-feet Equatorial.

Position = 54° 40′ *n f* or *s p* | 5 Obs. | Diff. = 1° 35′
Distance = 1′ 11″.751 | 5 Obs. | Diff. = 1″.010 . . . . . .

Blackman-street; December 30, 1823; Seven-feet Equatorial.

Equal; each of 8th magnitude.

Position = 55° 12′ *n f* or *s p* | 5 Obs. | Diff. = 1° 30′
Distance = 1′ 11″.530 | 5 Obs. | Diff. = 1″.130 . . . . . .

Mean Result.

Position 55° 26′ *n f* or *s p*; Distance 1′ 11″.640;
Epoch 1823.98.

No. CCCCXXX. R. A. $3^h\ 26^m$; Decl. 44° 12′ N.

STRUVE, 97; Hist. Cæl. 121;

Double; $7\frac{1}{2}$ and 8th magnitudes.

Blackman-street; Dec. 20, 1823; Five-feet Equatorial.

Position = 5° 11′ *sf* | 6 Obs. | Diff. = 0° 40′
Distance = 41″.672 | 5 Obs. | Diff. = 0″.947 } Satisfactory.

Blackman-street; December 29, 1823; Seven-feet Equatorial.

$7\frac{1}{2}$ and 8th magnitudes.

Position = 4° 8′ *sf* | 5 Obs. | Diff. = 0° 17′
Distance = 41″.350 | 5 Obs. | Diff. = 1″.082. . . . . .

Mean Result.

Position 4° 39′ *sf*; Distance 41″.511; Epoch 1823.98.

No. CCCCXXXI. R. A. $3^h\ 28^m$; Decl. 0° 3′ N.

STRUVE, 99; III. 45;

Double; large, white; small, blue; 7th and 12th magnitudes; small star is very faint, but is rendered decidedly more distinct by a slight illumination.

Blackman-street; December 20, 1823; Five-feet Equatorial.

Position = 46° 37′ *sp* | 5 Obs. | Diff. = 4° 57′
Distance = 5″.675 | 5 Obs. | Diff. = 1″.136 } Extremely difficult.

Blackman-street; January 29, 1824; Seven-feet Equatorial.

7th and 12th magnitudes.

Position = 42° 48′ *sp* | 5 Obs. | Diff. = 0° 40′
Distance = 5″.949 | 5 Obs. | Diff. = 1″.034 } Extremely difficult.

Passy; February 5, 1825; Seven-feet Equatorial.

7th and 12th magnitudes.

Position = 44° 40′ *sp*. Single measure. Extremely difficult.

Night is suddenly become cloudy, not a star visible.

No. CCCCXXXI. continued.

Mean Result.

Position 44° 42′ *sp*; Epoch 1824.38; Distance 5″.812; Epoch 1824.02.

The angle of 1781 (35° 33′ *sp*), is declared in the MS. observation to be too small by 6° or 8°; and if we suppose the mean (7°) to be the actual error, the corrected angle 42° 33′ agrees well enough with the present; so that no change need be presumed in this star. (H.)

No. CCCCXXXII. R. A. 3ʰ 29ᵐ; Decl. 33° 32′ N.

Struve, 100; II. 52;

A very neat double star; equal; each $8\frac{1}{2}$ magnitude.

Blackman-street; December 20, 1823; Five-feet Equatorial.

Position = 14° 6′ *np* or *sf*	5 Obs.	Diff. = 0° 57′	Difficult.
Distance = 3″.616	5 Obs.	Diff. = 0″.411	

Night very fine.

Blackman-street; December 29, 1823; Seven-feet Equatorial.

Equal; each of the 9th magnitude.

Position = 13° 22′ *sf* or *np*	5 Obs.	Diff. = 0° 45′	. . . . .
Distance = 3″.284	5 Obs.	Diff. = 0″.312	

Mean Result.

Position 13° 44′ *sf* or *np*; Distance 3″.450; Epoch 1823.98.

The position of 1783, 8° 24′ *np*, is called a small angle. It is doubtful therefore whether to ascribe the apparent motion of + 5° 20′, or + 0°.130 per annum to a real change in the stars, or to error of observation. (H.)

No. CCCCXXXIII. R. A. $3^h\ 30^m$; Decl. 28° 11′ N.

Nova; or 145.23;

Double; 8th and 8½ magnitudes; small, blue.

Passy; November 25, 1824: Seven-feet Equatorial.

Position = 64° 45′ *sp*	5 Obs.	Diff. = 2° 18′	. . . . .
Distance = 7″.196	5 Obs.	Diff. = 0″.769	

Passy; December 5, 1824; Seven-feet Equatorial.

9th and 9⅓ magnitudes.

Position = 66° 21′ *sp*	5 Obs.	Diff. = 3° 0′	Night is very bad.
Distance = 7″.203	5 Obs.	Diff. = 1″.154	

The evening being much more favourable, the following measures were procured.

Position = 64° 2′ *sp*	5 Obs.	Diff. = 3° 4′	. . . . .
Distance = 7″.579	5 Obs.	Diff. = 0″.456	

Mean Result.

Position 65° 3′ *sp* (15 Obs.); Distance 7″.326 (15 Obs.); Epoch 1824.91.

No. CCCCXXXIV. R. A. $3^h\ 32^m$; Decl. 37° 48′ N.

Struve, 102; Hist. Cæl. 122;

Double; large, white; small, blue; 8th and 9th magnitudes.

Blackman-street; December 20, 1823; Five-feet Equatorial.

Position = 0° 56′ *nf*	7 Obs.	Diff. = 0° 58′	Steady.
Distance = 28″.686	5 Obs.	Diff. = 0″.885	

These measures may be a little suspicious, the night having become very hazy; the small star during the observations, was extremely faint.

Blackman-street; January 27, 1824; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 1° 49′ *nf*	5 Obs.	Diff. = 1° 20′	. . . . .
Distance = 28″.213	6 Obs.	Diff. = 1″.130	

Mean Result.

Position 1° 33′ *nf*; Distance 28″.428; Epoch 1824.00.

No. CCCCXXXV. R. A. $3^h\ 35^m$; Decl. 40° 55′ N.

STRUVE, 103; Hist. Cæl. 137;

Double; 9th and 10th magnitudes; bear but a very feeble illumination.

Passy; December 7, 1824; Seven-feet Equatorial.

Position = 44° 28′ *nf* | 5 Obs. | Diff. = 1° 8′ } Very difficult.
Distance = 9″.877 | 5 Obs. | Diff. = 1″.130 }

Passy; December 10, 1824; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 44° 7′ *nf* | 5 Obs. | Diff. = 2° 35′ } Extremely difficult.
Distance = 9″.858 | 5 Obs. | Diff. = 0″.697 }

Mean Result.

Position 44° 18′ *nf*; Distance 9″.867; Epoch 1824.94.

No. CCCCXXXVI. R. A. $3^h\ 35^m$; Decl. 56° 31′ N.

STRUVE, 104; Hist. Cæl. 371;

Double; 7th and 8th magnitudes.

Blackman-street; December 20, 1823; Five-feet Equatorial.

Position = 15° 50′ *nf* | 5 Obs. | Diff. = 0° 41′. Night bad.

Observations of distance impracticable.

Blackman-street; December 22, 1823; Five-feet Equatorial.

7th and 8th magnitudes.

Position = 16° 21′ *nf* | 5 Obs. | Diff. = 1° 5′ } Unsteady.
Distance = 58″.357 | 5 Obs. | Diff. = 1″.168 }

Blackman-street; December 30, 1823; Seven-feet Equatorial.

7th and 8th magnitudes.

Position = 15° 56′ *nf* | 5 Obs. | Diff. = 0° 32′ } Unsteady.
Distance = 57″.055 | 5 Obs. | Diff. = 0″.529 }

The distances do not accord so well as might be expected; a circumstance which, by the non-existence of other observations, appears to have been overlooked.

Mean Result.

Position 16° 2′ *nf* (15 Obs.); Epoch 1823.98;

Distance 57″.706 (16 Obs.); Epoch 1823.99.

No. CCCCXXXVII. R. A. $3^h\ 36^m$; Decl. 23° 27′ N.

STRUVE, 105;

Double; 9th and 10th magnitudes.

Blackman-street; December 27, 1823; Five-feet Equatorial.

Position = 29° 48′ *sf*	5 Obs.	Diff. = 0° 37′	. . . . .
Distance = 34″.595	5 Obs.	Diff. = 0″.769	

Blackman-street; January 2, 1824; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 29° 38′ *sf*	5 Obs.	Diff. = 1° 0′	. . . . .
Distance = 34″.493	2 Obs.	Diff. = 0″.793	

No more measures can be obtained; not a star visible.

Mean Result.

Position 29° 43′ *sf*; Distance 34″.566; Epoch 1823.99.

No. CCCCXXXVIII. R. A. $3^h\ 37^m$; Decl. 23° 32′ N.

Alcyone; STRUVE, 106.

Quadruple; A 4th, B 6th, C 8th, and D of the 9th magnitudes.

Measures of A B.

Blackman-street; December 27, 1823; Five-feet Equatorial.

Position = 18° 57′ *np*	6 Obs.	Diff. = 0° 31′	Rather difficult.
Distance = 1′ 56″.718	6 Obs.	Diff. = 1″.358	

Just as these measures were begun, the night became suddenly hazy, so that A seemed of the 6th, and B of the 10th magnitudes.

Blackman-street; December 31, 1823; Seven-feet Equatorial.

4th and 6th magnitudes.

Position = 18° 28′ *np*	5 Obs.	Diff. = 0° 14′	Satisfactory.
Distance = 1′ 56″.496	5 Obs.	Diff. = 0″.769	

Measures of B C.

Blackman-street; December 27, 1823; Five-feet Equatorial.

6th and 8th magnitudes.

Position = 74° 10′ *np*	5 Obs.	Diff. = 0° 23′	. . . . .
Distance = 1″ 25″.360	5 Obs.	Diff. = 1″.295	

No. CCCCXXXVIII. continued.

Blackman-street; December 31, 1823; Seven-feet Equatorial.

7th and 10th magnitudes.

Distance = 1′ 25″.921 | 5 Obs. | Diff. = 1″.250. Very hazy.

The small star is extremely faint.

Passy; February 5, 1825; Seven-feet Equatorial.

6th and 8th magnitudes.

Position = 74° 7′ *np* | 5 Obs. | Diff. = 0° 30′

Measures of B D.

Blackman-street; December 27, 1823; Five-feet Equatorial.

6th and 9th magnitudes.

Position = 33° 49′ *np* | 5 Obs. | Diff. = 1° 11′
Distance = 1′ 14″.300 | 5 Obs. | Diff. = 1″.579 } Rather difficult.

Evening unfavourable; small star extremely faint.

Blackman-street; December 31, 1823; Seven-feet Equatorial.

6th and 10th, or 11th magnitudes.

Position = 33° 59′ *np* } 5 Obs. | Diff. = 1° 15′ }
Distance = 1′ 15″.072 } 5 Obs. | Diff. = 0″.841 } Difficult.

Night hazy; small star will bear only a very feeble illumination.

Mean Result.

of A B Position 18° 42′ *np*; Distance 1′ 56″.607;
Epoch 1824.00.

of B C. Position 74° 8′ *np*; Epoch 1824.36; Distance 1′ 25″.640;
Epoch 1824.00.

of B D. Position 33° 54′ *np*; Distance 1′ 14″.686;
Epoch 1824.00.

No. CCCCXXXIX. R. A. $3^h\ 38^m$; Decl. 10° 35′ N.

30 Tauri; STRUVE, 107; III. 66.

Double; 5th and 12th magnitudes; small star, blue, and very faint, but is rendered more distinct by a slight illumination.

Passy; December 22, 1824; Seven-feet Equatorial.

Position = 31° 32′ *nf*	7 Obs.	Diff. = 2° 47′	Excessively difficult.
Distance = 9″.791	5 Obs.	Diff. = 0″.601	

I have often in England, and frequently since my abode here, attempted to observe this double star, but till now alway unsuccessfully. The sky is nearly obscured by clouds, but the stars visible in the openings between the clouds are remarkably brilliant; they also pass through the field of the telescope extremely steadily: yet the wind is tremendously high. Notwithstanding these favourable circumstances the measures are attended with so much difficulty, that those of distance may perhaps be liable to an error of one, or even of two seconds.

Passy; December 23, 1824; Seven-feet Equatorial.

5th and 12th magnitudes.

Position = 30° 57′ *nf*	7 Obs.	Diff. = 2° 8′	Excessively difficult.
Distance = 9″.944	5 Obs.	Diff. = 0″.769	

The small star is blue, and is invisible without slight illumination; night remarkably favourable for difficult observations.

Mean Result.

Position 31° 14′ *nf* (14 Obs.); Distance 9″.867; Epoch 1824.98.

A measure in 1783, which gives the position 17° 15′ *nf*, can have no reliance placed on it, being contradicted by an estimation which makes it 40° or 45°; so that no conclusion respecting the motion or rest of this star can be formed. (H.)

No. CCCCCXL. R. A. $3^h\ 48^m$; Decl. 50° 10′ N.

43 Persei; STRUVE, 109; V. 41.

Double; 5th and 12th, or 15th magnitudes; small, blue.

Passy; December 29, 1824; Seven-feet Equatorial.

Position = 59° 53′ *nf* | 5 Obs. | Diff. = 1° 45′ } Very steady.
Distance = 1′ 16″.626 | 5 Obs. | Diff. = 0″.817 }

Measures of considerable difficulty; the small star under a very slight illumination becomes invisible.

Passy; January 2, 1825; Seven-feet Equatorial.

5th and 15th magnitudes.

Position = 60° 30′ *nf*; a single observation. Excessively difficult.

Passy; January 17, 1825; Seven-feet Equatorial.

5th and 12th, or 15th magnitudes.

Position = 57° 47′ *nf* | Single Observation }
Distance = 1′ 17″.975 | Single Observation } Excessively difficult.

The dew is so rapidly deposited on the exterior and interior surfaces of the object-glass, that the small star does not continue visible sufficiently long, for measures of accuracy to be procured. The night is particularly fine.

Mean Result.

Position 59° 39′ *nf* (7 Obs.); Epoch 1825.01;

Distance 1′ 16″.934 (6 Obs.); Epoch 1825.02.

No measures are given by Sir W. H. of this star. (H.)

No. CCCCXLI. R. A. $3^h\ 43^m$; Decl. 31° 20′ N.

ζ Persei; STRUVE, 108; VI. 96.

Quadruple; A 4th, B 12th, C 15th, and D of the 13th magnitudes: all south preceding. B is decidedly blue; bears a much better illumination than C or D; and D bears more than C.

Measures of A B.

Passy; December 22, 1824; Seven-feet Equatorial.

Position = 65° 47′ *sp*	5 Obs.	Diff. = 3° 40′	Difficult.
Distance = 12″.825	5 Obs.	Diff. = 0″.577	

This star B seems to have escaped the observations of Sir WILLIAM HERSCHEL, a circumstance which is rather singular, seeing that it is brighter than either of the more distant stars, whose situations relatively to ζ have been determined by him.—Is the star B variable in point of lustre? The stars between the clouds are magnificently bright, and are unusually steady, although the wind, which during the last thirty-six hours has been tremendously high, threatens every moment to carry away the roof of the observatory. The shutters are only separated from each other by a space equal to the diameter of the object end of the telescope.

Passy; December 23, 1824; Seven-feet Equatorial.

4th and 12th magnitudes.

Position 64° 53′ *sp*	5 Obs.	Diff. = 1° 27′	Very difficult.
Distance 13″.767	5 Obs.	Diff. = 0″.721	

Night very fine, but of A C no measures can be procured; and these of A B just obtained were attended with much greater difficulty than were those of last night; should therefore the two sets differ, those of last night must have the preference.

Passy; January 19, 1825; Seven-feet Equatorial.

4th and 12th magnitudes.

Position = 64° 33′ *sp* | 6 Obs. | Diff. = 2° 45′. Very difficult.

To night I should certainly say that the nearest star B was not so distinct without illumination as either of the more distant stars, nor does it bear illumination so well as the distant star D; but still allows much more of it than C. Are any of the group variable? The angle of position of A B was this evening gotten with considerable difficulty. The night is very fine.

No. CCCCXLI. continued.

Measures of A C.

Passy; December 22, 1824; Seven-feet Equatorial.

4th and 15th magnitudes.

Position = 71° 15′ *s p* | 5 Obs. | Diff. = 1° 57′
Distance = 1′ 25″.126 | 5 Obs. | Diff. = 1″.202
} Extremely difficult.

Night very cloudy: these observations gotten by availing myself of the rapid motion of the clouds, which now and then presents the stars to view; when visible they are unusually brilliant, and pass through the field as steadily as possible; to obtain these measures I have not quitted the observing chair during the last hour, nor do I deem the time ill-spent: except under very unusual circumstances, no observations of this pair of stars can reasonably be expected with this instrument.

Passy; December 29, 1824; Seven-feet Equatorial.

4th and 20th magnitudes.

Position = 72° 5′ *s p* | 3 Obs. | Diff. = 1° 38′. Excessively difficult.

Measures of distance impracticable; and the night is become so unfavourable, that more observations of position cannot be gotten: yet measures of A B and A D might be procured with facility.

Passy; January 19, 1825; Seven-feet Equatorial.

4th and 15th magnitudes.

Position = 70° 42′ *s p* | 5 Obs. | Diff. = 1° 20′
Distance = 1′ 23″.632 | 5 Obs. | Diff. = 1″.010
} Excessively difficult.

Night very fine.

Measures of A D.

Passy; December 22, 1824; Seven-feet Equatorial.

4th and 13th magnitudes.

Position = 85° 56′ *s p* | 7 Obs. | Diff. = 2° 10′
Distance = 1′ 59″.461 | 5 Obs. | Diff. = 0″.841
} Very difficult.

A B are more easily observed than A D, and A D than A C; but all present considerable difficulties, and measures of them with this instrument will never be procured, except under the most favourable circumstances.

No. CCCCXLI. continued.

Passy; December 23, 1824; Seven-feet Equatorial.

8th and 14th magnitudes.

Position = 84° 58′ *sp*	7 Obs.	Diff. = 1° 58′	Excessively difficult.
Distance = 1′ 58″.682	7 Obs.	Diff. = 1″.250	

The night is very fine, but no measures of A C can be obtained; and these of A D were gotten with much greater difficulty, than were last night's observations.

Mean Result.

of A B. Position 65° 2′ *sp* (16 Obs); Epoch 1825.00;
Distance 13″.296; Epoch 1824.98.

of A C. Position 71° 14′ *sp* (13 Obs.); Distance 1′ 24″.379;
Epoch 1825.01.

of A D. Position 85° 27′ *sp*; Distance 1′ 59″.071;
Epoch 1824.98.

On the 22nd January, 1783, the position of A C was 66° 36′ *sp*, differing — 4° 38′ from the present angle. According to PIAZZI this star has a proper motion of — 0″.14 per annum in R. A. amounting to nearly —6″ in 42 years. If this be confined to the large star, an apparent relative motion of the two stars should arise in the direction, and nearly to the amount actually observed. (H.)

No. CCCCXLII. R. A. $3^h\ 50^m$; Decl. 22° 41′ N.

STRUVE, 113; P. III. 213; Hist. Cæl. 196.

Double; large, white; small, blue; 8th and 8½ magnitudes.

Blackman-street; December 22, 1823; Five-feet Equatorial.

Position = 37° 40′ *sf*	5 Obs.	Diff. = 3° 5′	Difficult.
Distance = 7″.080	5 Obs.	Diff. = 0″.474	

Blackman-street; December 29, 1823; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 37° 42′ *sf*	5 Obs.	Diff. = 1° 52′	Unsteady.
Distance = 7″.314	6 Obs.	Diff. = 1″.202	

Mean Result.

Position 37° 41′ *sf*; Distance 7″.208; Epoch 1823.98.

No. CCCCXLIII. R. A. $3^h\ 57^m$; Decl. 13° 54′ N.

Nova;

Double; 9th and 10th magnitudes: a star C of the 5th magnitude precedes it to the north.

Measures of A B.

Passy; February 9, 1825; Seven-feet Equatorial.

Position = 23° 56′ *sf*	5 Obs.	Diff. = 2° 0′	}	Difficult.
Distance = 44″.087	5 Obs.	Diff. = 0″.793	}	

Passy; February 10, 1825; Seven-feet Equatorial.

9th and 11th magnitudes.

Position 2° 51′ *sf*	5 Obs.	Diff. = 0° 47′	}	Very difficult.
Distance 44″.337	5 Obs.	Diff. = 0″.913	}	

The fog is very troublesome.

Measures of A C.

Passy; February 10, 1825; Seven-feet Equatorial.

9th and 5th magnitudes.

Position = 31° 11′ *np*	5 Obs.	Diff. = 0° 32′	}	Tolerably steady.
Distance = 5′ 1″.909	5 Obs.	Diff. = 1″.082	}	

The star C preceding A to the north.

Passy; February 10, 1825; Portable Transit.*

Observed R. A. of the star A = $3^h\ 56'\ 44''.91$.

Mean Result.

of A B. Position 23° 59′ *sf*; Distance 44″.212; Epoch 1825.10.
of A C. ——— 31° 11′ *np*; ——— 5′ 1″.909; Epoch 1825.10.

* My TROUGHTON's Seven-feet Transit, to which reference was occasionally made in the former Memoir, being, on account of its bulk, ill calculated for a travelling companion, Mr. SIMMS was requested to construct me one that should be more appropriate; and as it fully answers the purpose for which it was designed, a brief description of it may not prove altogether uninteresting to the travelling Astronomer.

The centre piece of this instrument is spheroidal: the length of the horizontal or transverse axis, including the pivots, is 28 inches: on one end of this axis is a circle of 9.9 inches diameter, having a ring of silver soldered to its circumference, on which the dividing lines are drawn; the circle is provided with a level and two verniers; the scale of the former reading to 10 seconds, the latter to minutes only; it is intended solely as a finder, but will give the apparent altitude of a celestial object accurate to one minute. The tubes of the telescope are conical, screw into the centre-piece, and may be removed from it at pleasure, as may be also the circle from the

No. CCCCXLIV. R.A. 3h 58′; Decl. 22° 38′ N.

Nova;

Double; 9th and 9¼ magnitudes.

Passy; October 16, 1825; Seven-feet Equatorial.

Position = 84° 8′ *s p* | 5 Obs. | Diff. = 1° 15′ } Extremely difficult.
Distance = 6″.301 | 5 Obs. | Diff. = 0″.553 }

Neither star bears sufficient illumination. Night foggy.

Between this night and the 22nd of October, when the observatory at Passy was broken up, unfavourableness of the weather prevented me getting a second series of observations.

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axis; the cones however of the horizontal axis being firmly soldered and pinned to a shoulder projecting from the centre-piece, are not separable from it: the level of the axis is supplied with a silver scale, each division of which is equivalent to one second. In the focus of the object-glass are seven equi-distant wires, the equatorial interval between any two of them being about 20 seconds of time: on each side of the meridian wire, and at equal distances from it, are two others, so placed that the pole star shall pass from it to either of them in two minutes, for a purpose explained in the Memoirs of the Astronomical Society (vide Vol. I. page 238); applicable to each side plate, is an apparatus for regulating the quantity of light projected from the lamp upon the wires. The side plates are similar to those belonging to my Four-feet Transit Circle, and which (I believe) were described in Rees's Encyclopædia, when the instrument was the property of Mr. Groombridge. A second level for the horizontal axis, a spare one for the altitude circle, and a second wire-plate furnished with spiders' lines are at hand, and are ready for immediate use, should accident sustained by any of the first set, render them unfit for service—a reserve which no traveller should neglect; lest also any of the screws by which the various parts of the instrument are connected should be lost, a few additional ones placed in the box are not, (as I have found by experience), without their use.

The object-glass was made by Mr. Tulley, and originally belonged to the Westbury Circle: its clear aperture is 2.7 inches, its focal length is 43 inches; with a magnifying power of 300 it defines α Lyræ, Arcturus and Aldebaran, perfectly sharp and round; separates very distinctly the close stars of γ Leonis, ε Bootis, and ζ Orionis; whilst with 150 (the commonly used power) under favourable circumstances, the small star south preceding Polaris, is sufficiently visible to enable the observer to take its transit, with considerable precision.

The instrument is mounted on stone piers, and has retained its meridian position extremely well; fifteen months' experience has shown, that whilst the maximum error, to which the mean of a single series of observations of any star south of the zenith of my observatory, does not exceed 4-tenths of a second, often, very often, the result of a single set will not deviate 2-tenths from the true right ascension. When the pole star is steady, its transit over the wire may be determined to one second. Thus much for its *utility*.

As for its *portability*: the transverse axis, the telescope tubes, and the altitude circle, are included in a box 29 inches long, 14 inches broad, and 6½ inches deep. The three levels, the spare wire-plate, the light regulating apparatus, the lamp, &c. are lodged in a case 27½ inches in length, 11¼ in breadth, and 3¼ in depth. The side plates, with their appendages of nuts, screws, &c. are contained in a box 13¼ inches long, 7¼ inches broad, and 7¼ inches deep; and the tout ensemble is well accommodated under the seat of my travelling carriage. (The measures are all exterior.)

Passy; October 22, 1825.

No. CCCCXLV. R. A. $4^h\ 7^m$; Decl. 49° 50′ N.

STRUVE, 117;

Triple; A 7½, B 8th, and C of the 10th magnitudes.

Measures of A B.

Blackman-street; December 9, 1823; Five-feet Equatorial.

Position = 56° 36′ *np*	5 Obs.	Diff. = 1° 2′	. . . . .
Distance = 1′ 15″.047	5 Obs.	Diff. = 1″.358	

Blackman-street; December 29, 1823; Seven-feet Equatorial.

7½ and 8th magnitudes.

Position = 56° 31′ *np*	5 Obs.	Diff. = 0° 35′	. . . . .
Distance = 1′ 15″.364	6 Obs.	Diff. = 0″.841	

Measures of A C.

Blackman-street; December 9, 1823; Five-feet Equatorial.

7½ and 10th magnitudes.

Position = 10° 26′ *sp*	3 Obs.	Diff. = 6° 10′	Excessively difficult.
Distance = 2′ 29″.634	3 Obs.	Diff. = 3″.000	

These results are rather suspicious, the small star is so extremely obscure.

Blackman-street; December 29, 1823; Seven-feet Equatorial.

7½ and 12th magnitudes.

Position = 9° 47′ *sp*	3 Obs.	Diff. = 0° 20′	Extremely difficult.
Distance = 2′ 27″.974	3 Obs.	Diff. = 0″.649	

Passy; February 6, 1825; Seven-feet Equatorial.

7½ and 11th magnitudes.

Position = 10° 0′ *sp*	2 Obs.	Diff. = 0° 20′	Extremely difficult.
Distance = 2′ 28″.620	5 Obs.	Diff. = 0″.889	

Mean Result.

Of A B. Position 56° 33′ *np*; Distance 1′ 15″.220;
Epoch 1823.97.

Of A C. Position 10° 7′ *sp*; Distance 2′ 28″.720;
Epoch 1824.34.

No. CCCCXLVI. R. A. $4^h\ 7^m$; Decl. 7° 55′ S.

40, Eridani; STRUVE, 116;

Double; 6th and 10th magnitudes; small, blue.

Passy; December 10, 1824; Seven-feet Equatorial.

Position = 18° 18′ *sf* | 7 Obs. | Diff. = 1° 16′ } Excessively difficult.
Distance = 1′ 24″.697 ±; Single measure }

No satisfactory measures of distance can be procured; the deposition of moisture upon the object-glass is so considerable, notwithstanding a tube* twelve inches long is adapted to the object-end of the telescope, that I am obliged to wipe it every few minutes. The stars, even those of low altitude, are unusually steady: were it not for the annoyance of the dew, stars presenting almost any degree of difficulty might be well observed to night. Thermometer stands at 24°. The instrument is covered with hoar frost.

Passy; December 22, 1824; Seven-feet Equatorial.

5th, and 9th or 10th magnitudes.

Position = 17° 34′ *sf* | 5 Obs. | Diff. = 0° 39′ } On the meridian.
Distance = 1′ 24″.178 | 5 Obs. | Diff. = 1″.082 }

Measures extremely difficult. Stars so remarkably steady, that they may be kept bisected by the wire almost as long as I please. The wind is blowing a perfect hurricane; and fearing that a perseverance in observing, may occasion the destruction of the observatory, I am obliged, although reluctantly, to discontinue working. Scarcely ever do I remember to have seen such opportunities for making delicate observations, as the chasms between transient clouds have presented this evening.

Passy; December 23, 1824; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = 17° 45′ *sf*. Single observation. Excessively difficult.

The night suddenly has become bad; the small star is no longer visible.

Passy; January 28, 1825; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = 17° 56′ *sf* | 5 Obs. | Diff. = 0° 29′ } Excessively difficult.
Distance = 1′ 25″.279 | 5 Obs. | Diff. = 0″.962 }

Mean Result.

Position 17° 58′ *sf* (18 Obs.); Epoch 1824.99;
Distance 1′ 24″.726 (11 Obs.); Epoch 1825.00.

* The tube first employed for this purpose was made of pasteboard: the dew however was frequently so copious that its figure became deranged, and it could with difficulty be re-applied to the object-end of the telescope. Under these circumstances, the veneered deal of which the *English* hat-box is constructed, afforded a material not liable to this inconvenience—its pliability rendered it easy to add one cylinder to another, so as to form a tube of any desired length, its weight at the same time very slightly disturbing the equilibrium of the telescope.

No. CCCCXLVII. R. A. $4^h\ 13^m$; Decl. 33° 53′ N.

STRUVE, 124; IV. 72;

Double; $8\frac{1}{2}$ and 9th magnitudes.

Passy; December 10, 1824; Seven-feet Equatorial.

Position = 29° 48′ *nf*	5 Obs.	Diff. = 1° 48′
Distance = 20″.010	5 Obs.	Diff. = 1″.226

Passy; December 22, 1824; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 29° 51′ *nf*	5 Obs.	Diff. = 1° 1′
Distance = 19″.721	5 Obs.	Diff. = 1″.202

The small star is decidedly blue.

Mean Result.

Position 29° 49′ *nf*; Distance 19″.865; Epoch 1824.96.

The measures of 1783 were, Position 27° 24′ *nf*; Distance 16″.85; the former differing but little from the present; the latter presenting an increase of 3″.015, being more than should be expected on a total of 17″ only. (H.)

No. CCCCXLVIII. R. A. $4^h\ 18^m$; Decl. 29° 57′ N.

STRUVE, 124; Hist. Cæl. 136;

Double; 8th and 10th magnitudes; small, blue.

Blackman-street; December 22, 1823; Five-feet Equatorial.

Position = 55° 57′ *nf*	5 Obs.	Diff. = 1° 16′
Distance = 15″.276	5 Obs.	Diff. = 0″.284

Blackman-street; December 30, 1823; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 55° 29′ *nf*	5 Obs.	Diff. = 1° 15′
Distance = 15″.232	5 Obs.	Diff. = 0″.456

Mean Result.

Position 55° 43′ *nf*; Distance 15″.254; Epoch 1823.99.

No. CCCCXLIX. R. A. $4^h\ 18^m$; Decl. 9° 41′ N.

STRUVE, 126; IV. 75.

Double; 10th and 12th, or 15th magnitudes.

Passy; January 2, 1825; Seven-feet Equatorial.

Position = 66° 30′ *sf*; single observation. Excessively difficult.

These stars are so very faint, that measures entitled to any confidence cannot be obtained.

Passy; January 6, 1825; Seven-feet Equatorial.

11th and 15th magnitudes.

Position = 65° 56′ *sf*	5 Obs.	Diff. 3° 50′	}	Steady.
Distance = 22″.602 ±	2 Obs.	Diff. 2″.284.	}	

Observed when on the meridian. Night very fine; but the measures, particularly those of distance, are so excessively difficult, that I fear they must be considered as liable to some inaccuracy.

Passy; February 10, 1825; Seven-feet Equatorial.

11th and 15th magnitudes.

Position = 69° 16′ *sf*	5 Obs.	Diff. = 2° 55′	}	Excessively difficult.
Distance = 23″.496 ±	1 Obs.	Diff. = ———	}	

Measures little better than guesses. The fog is now become so dense, that to persevere in observing, is impossible.

Mean Result.

Position 67° 30′ *sf* (11 Obs.); Epoch 1825.04;
Distance 22″.900 ± (3 Obs.); Epoch 1825.05.

The angle, Feb. 16, 1783, was 61° 36′ *sf*, differing 5° 34′ from the present, being a change of + 0°.132 per annum. The distance at the period above specified was 22″.60, agreeing very exactly with the present. Future observations must decide on the reality of the motion here indicated. (H.)

No. CCCCL. R. A. $4^h\ 19^m$; Decl. 39° 35′ N.

145, 24, or Nova?

Double; $7\frac{1}{2}$ and 8th magnitudes.

Passy; December 26, 1824; Seven-feet Equatorial.

Position = 25° 28′ *sf*	5 Obs.	Diff. = 1° 21′	. . . . .
Distance = 9″.652	5 Obs.	Diff. = 0″.505	

Passy; December 29, 1824; Seven-feet Equatorial.

$7\frac{1}{2}$ and 8th magnitudes.

Position = 24° 36′ *sf*	5 Obs.	Diff. = 0° 52′	. . . . .
Distance = 9″.504	5 Obs.	Diff. = 0″.745	

Passy; February 11, 1825; Portable Transit.

Observed R. A. of the larger star = $4^h\ 19'\ 29''.74$.

Mean Result.

Position 25° 2′ *sf*; Distance 9″.578; Epoch 1824.99.

CCCCLI. R. A. $4^h\ 23^m$; Decl. 47° 3′ N.

Nova;

Double; $7\frac{1}{2}$ and 8th magnitudes.

Passy; February 9, 1825; Seven-feet Equatorial.

Position = 74° 16′ *sp*	5 Obs.	Diff. = 0° 48′	. . . . .
Distance = 1′ 0″.551	5 Obs.	Diff. = 0″.601	

Passy; February 11, 1825; Seven-feet Equatorial.

7th and $7\frac{1}{2}$ magnitudes.

Position = 74° 21′ *sp*	5 Obs.	Diff. = 0° 48′	. . . . .
Distance = 1′ 0″.357	5 Obs.	Diff. = 0″.505	

Passy; February 11, 1825; Portable Transit.

Observed R. A. of the larger star = $4^h\ 23'\ 26''.08$.

Mean Result.

Position 74° 18′ *sp*; Distance 1′ 0″.454; Epoch 1825.10.

No. CCCCLII. R. A. $4^h\ 26^m$; Decl. 16° 8′ N.

Aldebaran; Struve, 129; VI. 66.

Double; 1st and 20th magnitudes.

Passy; January 16, 1825; Seven-feet Equatorial.

Position = 53° 27′ $nf \pm$ | 4 Obs. | Diff. = 1° 12′. Excessively difficult.

Distance about a minute and a half by estimation; observations of distance cannot be procured, the small star being so excessively faint, that it becomes invisible under the slightest illumination. The position here given may be liable to an error of one, or two degrees.

Passy; January 19, 1825; Seven-feet Equatorial.

1st and 20th magnitudes.

Position = 54° 32′ $nf \pm$ | 2 Obs. | Diff. = 0° 36′. Excessively difficult.

The small star will not bear even the slightest illumination. The night being unusually favourable, I was very anxious to procure, if possible, measures entitled to confidence; and finding all attempts with a power of 179 ineffectual, I applied 273: no advantage however was gained by the change of eye-piece. The observations of position must, I fear, be regarded with distrust, and any of distance with this instrument are altogether impracticable.

Mean Result.

Position 53° 49′ $nf \pm$ (6 Obs.); Distance about one minute and a half by estimation; Epoch 1825.04.

In 1781 the angle was 52° 58′ nf. In 1802 it was measured at 54° 8′ nf: the present is nearly a mean between them. It is clear therefore that no very sensible motion can exist in this star. According to the proper motions set down in Piazzi's catalogue, the angle of position should be liable to a slow change in the direction $npsf$ or —, amounting however to a quantity hardly cognizable in 40 years. (H.)

No. CCCCLIII. R. A. $4^h\ 27^m$; Decl. 10° 5′ S.

STRUVE, 131; III. 100.

Double; 7th and 8th magnitudes.

Blackman-street; December 13, 1823; Five-feet Equatorial.

Position = 11° 36′ *sp*	5 Obs.	Diff. = 1° 48′	. . . . .
Distance = 13″.637	6 Obs.	Diff. = 1″.263	

Blackman-street; January 29, 1824; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 11° 9′ *sp*	5 Obs.	Diff. = 1° 15′	Difficult.
Distance = 13″.662	5 Obs.	Diff. = 0″.769	

Mean Result.

Position 11° 22′ *sp*; Distance 13″.634; Epoch 1824.01.

There seems a sensible change of position in this star. In 1783 (Feb. 19) its angle was 16° 24′ *sp*. The change amounts to 5° 2′ in the direction *sp nf* or +, i. e. to + 0°.128 per annum. An increase also of 1″.7 in distance has happened. As the star is an easy one to measure in favourable weather, there is much probability that these changes are owing to real motions. (H.)

No. CCCCLIV. R. A. $4^h\ 28^m$; Decl. 26° 35′ N.

STRUVE, 133; Hist. Cæl. 204.

Double; equal; each of the 8th magnitude.

Blackman-street; December 13, 1823; Five-feet Equatorial.

Position = 60° 36′ *nf* or *sp*	5 Obs.	Diff. = 0° 33′	. . . . .
Distance = 3″.913	5 Obs.	Diff. = 0″.379	

Blackman-street; December 30, 1823; Seven-feet Equatorial.

Equal; each of the 8th magnitude.

Position = 61° 10′ *sp* or *nf*	5 Obs.	Diff. = 1° 0′	. . . . .
Distance = 3″.926	5 Obs.	Diff. = 0″.336	

Mean Result.

Position 60° 53′ *sp* or *nf*; Distance 3″.919; Epoch 1823.97.

No. CCCCLV. R. A. $4^h\ 31^m$; Decl. 22° 36′ N.

τ Tauri; Struve, 134; VI. 7;

Double; large, white; small, blue; 5th and 8½ magnitudes.

Blackman-street; December 27, 1823; Five-feet Equatorial.

Position = 58° 35′ *sp*	5 Obs.	Diff. = 0° 30′	}
Distance = 1′ 2″.425	5 Obs.	Diff. = 0″.632	}

Blackman-street; December 31, 1823; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = 58° 24′ *sp*	5 Obs.	Diff. = 0° 55′	} Rather difficult.
Distance = 1′ 3″.210	5 Obs.	Diff. = 0″.577	}

Night very hazy. The small star is indistinct.

Mean Result.

Position 58° 28′ *sp*; Distance 1′ 2″.817; Epoch 1824.00.

No measures of position are given by Sir W. H. The distance does not seem to have changed. (H.)

No. CCCCLVI. R. A. $4^h\ 32^m$; Decl. 0° 35′ N.

Struve, 135; II. 81:

Triple; A 9th, B 11th or 12th, and C of the 15th magnitudes.

Passy; January 6, 1825; Seven-feet Equatorial.

Measures of A B.

Position = 56° 44′ *sp*	6 Obs.	Diff. = 2° 14′	} Very difficult.
Distance = 6″.494	5 Obs.	Diff. = 1″.649	}

Measures of A C.

Position = 6° 0′ *sp* ±	single observation	} Excessively difficult.
Distance = 1′ 44″.412 ±	single observation	}

The star C is so extremely obscure, that accurate measures cannot be procured; the night is very favourable.

No. CCCCLVI. continued.

Passy; January 19, 1825; Seven-feet Equatorial.

Measures of A B.

9th and 12th magnitudes.

Position = 56° 1′ *n p*	5 Obs.	Diff. = 9° 9′	Excessively difficult.
Distance = 6″.417	5 Obs.	Diff. = 0″.505	

I see the small distant star C, but can neither measure its position or distance.

Night fine.

Mean Result.

of A B. Position 56° 24′ *n p* (11 Obs.); Distance 6.″455 (10 Obs.);

Epoch 1825.03.

of A C. Position 6° 0′ *s p* ±; Distance 1′ 44″.412 ±;

Epoch 1825.01.

(Single observations.)

The position Jan. 31, 1783, was 51° 36′ *n p.* differing 4° 48′ from the present. (H.)

No. CCCCLVII. R. A. 4ʰ 44ᵐ; Decl. 1° 34′ S.

STRUVE, 138; Hist. Cæl. 251;

Double; nearly equal; 8½ and 8¾ magnitudes.

Blackman-street; December 9, 1823; Five-feet Equatorial.

Position = 84° 21′ *n p*	5 Obs.	Diff. = 0° 24′	. . . . .
Distance = 41″.697	5 Obs.	Diff. = 0″.632	

Blackman-street; January 29, 1824; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 82° 53′ *n p*	5 Obs.	Diff. = 1° 5	Difficult.
Distance = 41″.182	5 Obs.	Diff. = 1″.010	

Passy; March 26, 1825; Seven-feet Equatorial.

8¾ and 9th magnitudes.

Position = 83° 48′ *n p*	5 Obs.	Diff. = 0° 45′	. . . . .
Distance = 41″.591	5 Obs.	Diff. = 1″.202	

Observed by twilight, without artificial illumination.

Mean Result.

Position 83° 41′ *n p*; Distance 41″.490; Epoch 1824.42.

No. CCCCLVIII. R. A. $4^h\ 44^m$; Decl. 7° 6′ N.

STRUVE, 139; Hist. Cæl. 42;

Double; 9½ and 10th magnitudes.

Blackman-street; December 27, 1823; Five-feet Equatorial.

Position = 73° 7′ *sp*	5 Obs.	Diff. = 1° 30′	Very difficult.
Distance = 16″.618	5 Obs.	Diff. = 0″.505	

Neither star bears a good illumination.

Blackman-street; January 29, 1824; Seven-feet Equatorial.

9½ and 9¾ magnitudes.

Position = 73° 10′ *sp*	5 Obs.	Diff. = 1° 0′	Very difficult.
Distance = 17″.249	5 Obs.	Diff. = 1″.034	

Mean Result.

Position 73° 8′ *sp*; Distance 16″.933; Epoch 1824.03.

No. CCCCLIX. R. A. $4^h\ 47^m$; Decl. 60° 11′ N.

10, Camelopardali; STRUVE, 141; VI. 36;

Double; 5th and 9th magnitudes; small, blue.

Passy: January 5, 1825; Seven-feet Equatorial.

Position = 62° 11′ *sp*	5 Obs.	Diff. = 0° 36′	. . . . .
Distance = 1′ 20″.276	5 Obs.	Diff. = 0″.721	

Passy; February 6, 1825; Seven-feet Equatorial.

5th and 9th magnitudes.

Position = 62 25′ *sp*	5 Obs.	Diff. = 0° 37′	. . . . .
Distance = 1′ 19″.443	5 Obs.	Diff. = 1″.346	

Mean Result.

Position 62° 18′ *sp*; Distance 1′ 19″.859; Epoch 1825.05.

No measures given by Sir W. HERSCHEL of this star. (H.)

No. CCCCLX. R. A. $4^h\ 49^m$; Decl. $1°\ 23'$ N.

STRUVE, 145; I. 68;

Double; equal; each of the 10th magnitude; a star of the 5th magnitude follows it to the south.

Passy; January 6, 1825; Seven-feet Equatorial.

Position $= 83°\ 41'\ sf$ or np | 7 Obs. | Diff. $= 4°\ 34'$ } Extremely difficult.
Distance $= 2''.301$ | 5 Obs. | Diff. $= 0''.481$ }

Observations made with 179; a power of 273 was tried, but without any advantage. The night is remarkably fine, and the stars are very steady. It freezes hard.

Passy; January 17, 1825; Seven-feet Equatorial.

Equal; each of the 10th magnitude.

Position $= 84°\ 25'\ sf$ or np | 5 Obs. | Diff. $= 5°\ 30'$. Excessively difficult.

Of distance no measures can be obtained, in consequence of the rapid deposition of moisture on each surface of the object-glass. Night very fine; the stars are remarkably brilliant. A slight frost.

Passy; February 6, 1825; Seven-feet Equatorial.

Equal; each of the 10th magnitude.

Distance $= 2''.830$ | 5 Obs. | Diff. $= 0''.360$. Excessively difficult.

The night is become suddenly cloudy; no more observations can be procured.

Mean Result.

Position $83°\ 49'\ sf$ or np (12 Obs.); Epoch 1825.04;
Distance $2''.565$ (10 Obs.); Epoch 1825.06.

In 1783, January 22, (1783.06), the Position was $84°\ 54'\ nf$, being a change of $11°\ 17'$ in 42.00 years, in the direction $npsf$, or retrograde—that is, $-0°.269$ per annum. The change is so considerable, as to render it highly probable that this star belongs to the class of binary, or connected stars, and should therefore be assiduously watched. (H.)

No. CCCCLXI. R. A. $4^h\ 50^m$; Decl. $26°\ 25'$ N.

STRUVE, 146;

Double; 7th and $8\frac{1}{2}$ magnitudes.

Passy; December 5, 1824; Seven-feet Equatorial.

Position = 68° 33′ *sf* | 5 Obs. | Diff. = 0° 29′
Distance = 1′ 18″.802 | 5 Obs. | Diff. = 1″.370

Passy; December 10, 1824; Seven-feet Equatorial.

7th and 9th magnitudes.

Position = 68° 40′ *sf* | 5 Obs. | Diff. = 0° 47′
Distance = 1′ 18″.321 | 5 Obs. | Diff. = 0″.865

The small star is blue.

Mean Result.

Position 68° 36′ *sf*; Distance 1′ 18″.561; Epoch 1824.94.

No. CCCCLXII. R. A. $4^h\ 51^m$; Decl. 3° 22′ N.

STRUVE, 147; Hist. Cæl. 465.

Double; $6\frac{1}{2}$ and 7th magnitudes.

Passy; December 5, 1824; Seven-feet Equatorial.

Position = 11° 4′ *sp* | 5 Obs. | Diff. = 0° 47′
Distance = 21″.601 | 5 Obs. | Diff. = 0″.336 } On the meridian.

Night not very favourable.

Passy; December 10, 1824; Seven-feet Equatorial.

7th and 8th magnitudes.

Position = 9° 45′ *sp* | 5 Obs. | Diff. = 0° 51′
Distance = 22″.423 | 5 Obs. | Diff. = 1″.202 } Steady.

The dew is extremely troublesome.

Passy; February 4, 1825; Seven-feet Equatorial.

7th and 8th magnitudes.

Position = 10° 30′ *sp* | 5 Obs. | Diff. = 1° 29′
Distance = 21″.399 | 5 Obs. | Diff. = 0″.745 } Steady.

Mean Result.

Position 10° 26′ *sp* (15 Obs.); Distance 21″.808 (15 Obs.); Epoch 1824.99.

No. CCCCLXIII. R. A. $4^h\ 52^m$; Decl. 11° 7′ N.

STRUVE, 149;

Double; 7th and 12th magnitudes.

Passy; February 8, 1825; Seven-feet Equatorial.

Position = 60° 39′ *nf*	5 Obs.	Diff. = 1° 29′	Excessively difficult.
Distance = 33″.787 ±	3 Obs.	Diff. = 2″.620	

The small star scarcely bears the least illumination. The observations of distance deserve probably but little confidence. The night is unfavourable.

Passy; February 9, 1825; Seven-feet Equatorial.

th and 12th magnitudes.

Position = 60° 11′ *nf*	5 Obs.	Diff. = 4° 23′	Extremely difficult.
Distance = 33″.967	5 Obs.	Diff. = 1″.443	

Mean Result.

Position 60° 25′ *nf*; (10 Obs.); Distance 33″.604 (8 Obs.); Epoch 1825.10.

No. CCCCLXIV. R. A. $4^h\ 53^m$; Decl. 79° 0′ N.

62 (BODE), Camelopardali; STRUVE, 152;

Double; 7th and 10th magnitudes; small, blue.

Passy; February 6, 1825; Seven-feet Equatorial.

Position = 76° 56′ *np*	5 Obs.	Diff. = 0° 13′	Very steady.
Distance = 37″.290	5 Obs.	Diff. = 0″.481	

Passy; February 8, 1825; Seven-feet Equatorial.

7th and 10th magnitudes.

Position = 75° 50′ *np*	5 Obs.	Diff. = 1° 12′	. . . . .
Distance = 36″.734	5 Obs.	Diff. = 1″.010	

The small star is decidedly blue.

Mean Result.

Position 76° 23′ *np*; Distance 37″.012; Epoch 1825.10.

No. CCCCLXV. R. A. $4^h\ 53^m$; Decl. 1° 20′ N.

STRUVE, 150; P. IV. 278.

Double; 7th and 8th magnitudes; small, blue.

Passy; December 5, 1824; Seven-feet Equatorial.

Position = 43° 13′ *nf*	5 Obs.	Diff. = 1° 50′	. . . . .
Distance = 14″.340	5 Obs.	Diff. = 0″.601	

Passy; December 10, 1824; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 40° 16′ *nf*	5 Obs.	Diff. = 2° 1′	. . . . .
Distance = 14″.907	5 Obs.	Diff. = 0″.481	

Passy; January 16, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 41° 36′ *nf*	5 Obs.	Diff. = 3° 55′	. . . . .
Distance = 14″.059	5 Obs.	Diff. = 0″.384	

A double star of the 6th class is in the field with this double star: its smaller star has nearly the same right ascension as the larger of the stars here measured.

Mean Result.

Position 41° 42′ *nf* (15 Obs.); Distance 14″.435 (15 Obs.); Epoch 1824.97.

No. CCCCLXVI. R. A. $4^h\ 57^m$; Decl. 21° 27′ N.

105 Tauri; STRUVE, 155; VI. 105.

Double; 7th and 10th magnitudes; small, blue.

Passy; January 17, 1825; Seven-feet Equatorial.

Position = 19° 8′ *sp*	5 Obs.	Diff. = 1° 18′	Extremely difficult.
Distance = 1′ 49″.944	5 Obs.	Diff. = 0″.625	

One hour and a half east of the meridian, at the time of observation.

No. CCCCLXVI. continued.

Passy; January 17, 1825; Seven-feet Equatorial.

7th and 12th magnitudes.

Position = 18° 59′ *sp*	5 Obs.	Diff. = 0° 31′	Extremely difficult.
Distance = 1″ 50″.036	5 Obs.	Diff. = 1″.106	

Observed when on the meridian: the small star bears only a very feeble illumination. This set of measures was taken inadvertently; I had omitted to note the star as observed, in the earlier part of the evening.

Mean Result.

Position 19° 3′ *sp*; Distance 1′ 49″.990; Epoch 1825.04.

Sept. 28, 1783. Position 18° 0′ *sp*; Dist. 1′ 41″.5, being a change of 1° 3′ in position and + 7″.5 in distance; but this last quantity, for the reasons already given, cannot be relied on. There is therefore no reason to presume motion in these stars. (H.)

No. CCCCLXVII. R. A. 4^h 59^m; Decl. 31° 51′ N.

Nova;

Double; 9th and 9½ magnitudes.

Passy; October 11, 1825; Seven-feet Equatorial.

Position = 16° 12′ *nf*	5 Obs.	Diff. = 3° 12′	Extremely difficult.
Distance = 4″.221	5 Obs.	Diff. = 0″.216	

Observed when 2½ hours east of the meridian. Night foggy; stars occasionally very faint.

Passy; October 16, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 15° 8′ *nf*	5 Obs.	Diff. = 2° 42′	Excessively difficult.
Distance = 4″.922	5 Obs.	Diff. = 0″.481	

Night foggy, and stars so faint, that with 181 they cannot be seen; observed with 157.

Mean Result.

Position 15° 40′ *nf*; Distance 4″.571; Epoch 1825.78.

No. CCCCLXVIII. R. A. $5^h\ 0^m$; Decl. 13° 47′ N.

STRUVE, 167; Hist. Cæl. 203.

Double; 9th and 10th magnitudes.

Passy; December 31, 1824; Seven-feet Equatorial.

Position = 72° 23′ *sf*	5 Obs.	Diff. = 1° 30′	Very difficult.
Distance = 27″.556	5 Obs.	Diff. = 1″.010	

These stars bear only a feeble illumination; but the night is unfavourable.

Passy; January 2, 1825; Seven-feet Equatorial.

10th and 11th magnitudes.

Position = 72° 52′ *sf*	5 Obs.	Diff. = 2° 10′	Excessively difficult.
Distance = 26″.811	5 Obs.	Diff. = 1″.515	

Mean Result.

Position 72° 37′ *sf*; Distance 27″.183; Epoch 1825.00.

No. CCCCLXIX. R. A. $5^h\ 4^m$; Decl. 2° 38′ N.

145.21, or Nova?

Double; 7th and 10th magnitudes: small, decidedly blue, and bears a good illumination.

Passy; February 12, 1825: Seven-feet Equatorial.

Position = 28° 33′ *nf*	5 Obs.	Diff. = 4° 42′	Unsteady.
Distance = 6″.670	5 Obs.	Diff. = 0″.577	

Passy; February 17, 1825; Seven-feet Equatorial.

7th and 10th magnitudes.

Position = 27° 30′ *nf*	5 Obs.	Diff. = 2° 30′	Very unsteady.
Distance = 7″.439	5 Obs.	Diff. = 0″.697	

Passy; February 23, 1825; Portable Transit.

Observed R. A. of the larger star = $5^h\ 4'\ 10''.83$.

Mean Result.

Position 28° 1′ *nf*; Distance 7″.054; Epoch 1825.12.

No. CCCCLXX. R. A. $5^h\ 5^m$; Decl. 17° 40′ S.

STRUVE, 161; Hist. Cæl. 562.

Double; 10th and $10\frac{1}{2}$ magnitudes.

Passy; January 17, 1825; Seven-feet Equatorial.

Position = 7° 43′ *n p*	5 Obs.	Diff. = 0° 30′	Excessively difficult.
Distance = 48″.652	5 Obs.	Diff. = 0″.721	

Neither star bears sufficient illumination, and the observations of distance may perhaps be a little inaccurate.

Passy; January 19, 1825; Seven-feet Equatorial.

10th and $10\frac{1}{2}$ magnitudes.

Position = 7° 33′ *n p*	5 Obs.	Diff. = 1° 2′	Excessively difficult.
Distance = 47″.956	5 Obs.	Diff. = 1″.443	

Mean Result.

Position 7° 38′ *n p*; Distance 48″.304; Epoch 1825.05.

No. CCCCLXXI. R. A. $5^h\ 5^m$; Decl. 33° 9′ N.

STRUVE, 162; II. 48.

Double; $8\frac{1}{2}$ and 9th magnitudes.

Passy; December 5, 1824; Seven-feet Equatorial.

Position = 18° 5′ *s p*	5 Obs.	Diff. = 1° 32′	. . . . .
Distance = 2″.837	5 Obs.	Diff. = 0″.553	

Passy; December 22, 1824; Seven-feet Equatorial.

$8\frac{1}{2}$ and 9th magnitudes.

Position = 17° 9′ *s p*	5 Obs.	Diff. = 3° 10′	. . . . .
Distance = 2″.808	5 Obs.	Diff. = 0″.865	

Mean Result.

Position 17° 37′ *s p*; Distance 2″.822; Epoch 1824.95.

The position in 1783 was 15° 48′ *n f*, so that there is no reason to suppose any change in this star, as there is so little difference in their magnitudes, that the larger might easily be mistaken for the smaller, and thus 180° difference in position arise. (H.)

No. CCCCLXXII. R. A. $5^h\ 6^m$; Decl. 39° 58′ N.

λ Aurigæ; STRUVE, 164; V. 22.

Triple; A 5th, B 11th, and C of the 12th magnitudes.

Measures of A B.

Passy; February 9, 1825; Seven-feet Equatorial.

Position = 55° 24′ *nf*	5 Obs.	Diff. = 1° 29′	Extremely difficult.
Distance = 1′ 42″.646	5 Obs.	Diff. = 1″.827	

Passy; February 12, 1825; Seven-feet Equatorial.

5th and 11th magnitudes.

Position = 55° 25′ *nf*	5 Obs.	Diff. = 0° 16′	Extremely difficult.
Distance = 1′ 41″.640	5 Obs.	Diff. = 2″.356	

The small star to-night will bear but the slightest illumination.

North preceding, and at about the same distance, is a star of the 15th magnitude; but it is so excessively faint, that neither its angle with, or distance from A can be observed; yet the night is very clear.

Measures of A C.

Passy; February 9, 1825; Seven-feet Equatorial.

5th and 12th magnitudes.

Position = 8° 23′ *nf* | 2 Obs. | Diff. = 0° 33′. Excessively difficult.

The distance I cannot obtain; the small star C will not bear the slightest illumination. The star C is also itself double of the 5th class; but although the night is remarkably fine, I cannot get even approximate measures of it.

Passy; February 12, 1825; Seven-feet Equatorial.

5th and 12th magnitudes.

Position = 8° 33′ *nf*	5 Obs.	Diff. = 0° 18′	Excessively difficult.
Distance = 3′ 13″.941	5 Obs.	Diff. = 1″.034	

The star C seen double of the 5th class; but its small star, which is south preceding, is so very obscure, that my attempts to procure measures of it have been unsuccessful; yet the night is exceedingly fine.

Mean Result.

of A B. Position 55° 24′ *nf*; Distance 1′ 42″.143.

of A C. Position 8° 30′ *nf* (7 Obs.); Distance 3′ 13″.941 (5 Obs.);

Epoch 1825.10.

Sir W. HERSCHEL has no measures of this star. (H.)

No. CCCCCLXXIII. R. A. $5^h\ 10^m$; Decl. 15° 26′ S.

STRUVE, 168; Hist. Cæl. 467.

Double; 8th and 10th magnitudes.

Passy; December 31, 1824; Seven-feet Equatorial.

Position = 32° 50′ *n p* | 5 Obs. | Diff. = 0° 28′. Very difficult.

The night is suddenly become bad; observations of distance impracticable.

Passy; January 25, 1825; Seven-feet Equatorial.

8th and 12th magnitudes.

Position = 34° 13′ *n p* | 5 Obs. | Diff. = 3° 35′
Distance = 20″.932 | 5 Obs. | Diff. = 1″.995 } Extremely difficult.

The small star bears only the slightest illumination. Night fine.

Passy; February 5, 1825; Seven-feet Equatorial.

8th and 12th magnitudes.

Position = 35° 1′ *n p* | 5 Obs. | Diff. = 1° 19′
Distance = 20″.757 | 5 Obs. | Diff. = 0″.841 } Extremely difficult.

Mean Result.

Position 34° 1′ *n p* (15 Obs.); Epoch 1825.05.

Distance 20″.844 (10 Obs); Epoch 1825.07.

No. CCCCLXXIV. R. A. $5^h\ 11^m$; Decl. 10° 56′ S.

STRUVE, 169; Hist. Cæl. 313.

Double; 8½ and 9th magnitudes.

Passy; December 5, 1824; Seven-feet Equatorial.

Position = 1° 35′ *n p* | 5 Obs. | Diff. = 1° 28′
Distance = 10″.713 | 5 Obs. | Diff. = 0″.721 . . . . .

Passy; December 10, 1824; Seven-feet Equatorial.

8½ and 9th magnitudes.

Position = 3° 5′ *n p* | 5 Obs. | Diff. = 1° 25′
Distance = 11″.166 | 5 Obs. | Diff. = 0″.721 } On the meridian.

Passy; February 5, 1825; Seven-feet Equatorial.

8½ and 9th magnitudes.

Position 3° 47′ *n p* | 5 Obs. | Diff. = 1° 45. . . . . .

Mean Result.

Position 2° 49′ *n p* (15 Obs.); Epoch 1824.99;

Distance 10″.939 (10 Obs.); Epoch 1824.94.

No. CCCCLXXV. R. A. $5^h\ 12^m$; Decl. $8°\ 15'$ S.

82 (Bode) Orionis; Struve, 171; IV. 87.

Double; 8th and 10th magnitudes.

Passy; January 17, 1825; Seven-feet Equatorial.

Position = 86° 32′ *nf* | 5 Obs. | Diff. = 0° 33′ } Very difficult.
Distance = 35″.436 | 5 Obs. | Diff. = 0″.649 }

Passy: January 19, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 86° 41 *nf* | 5 Obs. | Diff. = 1° 3′ } Very difficult.
Distance = 36″.953 | 5 Obs. | Diff. = 0″.841 }

Passy; February 9, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Distance = 34″.645 | 5 Obs. | Diff. = 1″.274. Very difficult.

Mean Result.

Position 86° 46′ *nf* (10 Obs.); Epoch 1825.05;
Distance 35″.678 (15 Obs.); Epoch 1825.06.

By a mean of two measures in 1783, the position comes out for that epoch 85° 24′, differing but 1° 22′ from the present. The distance at the beginning of 1783 was 29″.30, and the measure is called very exact; yet an increase of distance to the extent of 6″.38 is beyond probability, a circumstance which proves the occasional occurrence of the micrometrical error already pointed out, even in distances so low as 30″. (H.)

No. CCCCLXXVI. R. A. $5^h\ 12^m$; Decl. $18°\ 43'$ S.

STRUVE, 170; Hist. Cæl. 562.

Double; equal, each $7\frac{1}{2}$ magnitude.

Passy; December 5, 1824; Seven-feet Equatorial.

Position = $72°\ 39'$ *nf* or *sp*	5 Obs.	Diff. = $1°\ 31'$	. . . . .
Distance = $39''.740$	5 Obs.	Diff. = $1''.563$	

Passy; December 10, 1824; Seven-feet Equatorial.

Equal; each $7\frac{1}{2}$ magnitude.

Position = $72°\ 43'$ *nf* or *sp*	5 Obs.	Diff. = $1°\ 8'$	Steady.
Distance = $39''.687$	5 Obs.	Diff. = $0''.577$	

Night favourable, observed on the meridian.

Mean Result.

Position $72°\ 41'$ *nf* or *sp*; Distance $39''.713$; Epoch 1824.94.

No. CCCCLXXVII. R. A. $5^h\ 13^m$; Decl. $34°\ 43'$ N.

STRUVE, 173; IV. 101.

Double; 9th and 12th magnitudes.

Passy; December 23, 1824; Seven-feet Equatorial.

Position = $77°\ 15'$ *np* | 5 Obs. | Diff. = $2°\ 3'$. Extremely difficult.

Observations of distance cannot be obtained; the night is become very cloudy.

Passy; January 25, 1825; Seven-feet Equatorial.

7th and 9th magnitudes.

Position = $75°\ 33'$ *np*	5 Obs.	Diff. = $1°\ 7'$	. . . . .
Distance = $32''.075$	5 Obs.	Diff. = $0''.553$	

Passy; February 2, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = $75°\ 55'$ *np*	5 Obs.	Diff. = $0°\ 30'$	. . . . .
Distance = $31''.853$	5 Obs.	Diff. = $0''.962$	

Mean Result.

Position $76°\ 14'$ *np* (15 Obs.); Epoch 1825.04;

Distance $31''.964$ (10 Obs.); Epoch 1825.07.

This measure of position, compared with that of 1783, presents only $1\frac{1}{4}'$ of difference. The distances are however evidently not comparable, owing to the micrometrical irregularity already pointed out. (H.)

No. CCCCLXXVIII. R. A. $5^h\ 14^m$; Decl. 17° 13′ N.

111 Tauri; STRUVE, 174; V. 110.

Double; 7th and 10th magnitudes; small, blue.

Passy; January 17, 1825; Seven-feet Equatorial.

Position = 1° 25′ *np*	5 Obs.	Diff. = 0° 34′	Difficult.
Distance = 1′ 1″.823	5 Obs.	Diff. = 1″.418	

Passy; February 2, 1825; Seven-feet Equatorial.

8th and 12th magnitudes.

Position = 1° 10′ *np*	5 Obs.	Diff. = 0° 52′	Very difficult.
Distance = 1′ 1″.703	5 Obs.	Diff. = 0″.481	

When the position wire was set purposely to zero, the small star remained below the wire, whilst the larger continued bisected by it, during their passage across the field.

Mean Result.

Position 1° 17′ *np*; Distance 1′ 1″.763; Epoch 1825.06.

There is no reason to suppose a change of position in this star, the angle of 1783 being 3° 48′ *np*. (H.)

No. CCCCLXXIX. R. A. $5^h\ 16^m$; Decl. 1° 39′ N.

Nova;

Double; 9th and 10th magnitudes.

Passy; March 5, 1825; Seven-feet Equatorial.

Position = 52° 18′ *sp* | 6 Obs. | Diff. = 1° 58′ Extremely difficult.

The night is become so bad, that observations of distance cannot be procured; it is probably between 40 and 50 seconds.

Passy; March 5, 1825; Portable Transit.

Observed R. A. of the larger star = $5^h.15'.34''.23$.

Passy; March 17, 1825; Seven-feet Equatorial.

10th and 11th magnitudes.

Position = 50° 34′ *sp*	5 Obs.	Diff. = 0° 52′	Extremely difficult.
Distance = 46″.427	5 Obs.	Diff. = 1″.010	

No. CCCCLXXIX. continued.

Passy; March 26, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 51° 1′ *sp*	5 Obs.	Diff. = 0° 33′	Very difficult.
Distance = 46″.833	5 Obs.	Diff. = 1″.106	

Observed by twilight, without artificial illumination.

A distant star C of the 5th magnitude follows A to the North.

Measures of A C.

Passy; March 17, 1825; Seven-feet Equatorial.

Position = 54° 44′ *nf*	5 Obs.	Diff. = 0° 29′	By twilight.
Distance = 2′ 38″.690	5 Obs.	Diff. = 0″.865	

Without artificial illumination.

Passy; March 26, 1825; Seven-feet Equatorial.

9th and 5th magnitudes.

Position = 54° 46′ *nf*	3 Obs.	Diff. = 0° 32′	By twilight.
Distance = 2′ 37″.615	3 Obs.	Diff. = 0″.456	

Without artificial illumination.

Mean Result.

of A B. Position 51° 21′ *sp* (16 Obs.); Epoch 1825.20;
Distance 46″.630 (10 Obs.); Epoch 1825.22.

of A C. Position 54° 45′ *nf* (8 Obs.); Distance 2′ 38″.162 (8 Obs.);
Epoch 1825.22.

The star C being to the north of A.

No. CCCCLXXX. R. A. 5ʰ 16ᵐ; Decl. 1° 45′ N.

STRUVE, 177; I. 52.

Double; 9th and 12th magnitudes; small, blue.

Passy; January 6, 1825; Seven-feet Equatorial.

Position = 54° 51′ *np*	7 Obs.	Diff. = 6° 0′	Excessively difficult.
Distance = 2″.974	5 Obs.	Diff. = 0″.432	

Observed when 15 minutes west of the meridian. Stars very steady. The deposition of moisture on the inner and outer surfaces of the object-glass is becoming troublesome. Thermometer in the observatory stands at 24½ degrees.

No. CCCCLXXX. continued.

Passy; February 4, 1825; Seven-feet Equatorial.

9th and 12th magnitudes.

Position = 49° 42′ *np*	7 Obs.	Diff. = 5° 5′	Excessively difficult.
Distance = 2″.991	5 Obs.	Diff. = 0″.408	

Whilst making these observations, I did not feel the slightest confidence in their accuracy; the smaller star could only be seen by glimpses, and then very indistinctly; indeed this double star, as well as the 53rd of the 1st class (see the following page), would be proper objects for Mr. Herschel's 20-feet reflector.

Passy; February 23, 1825; Seven-feet Equatorial.

9th and 12th magnitudes.

Position = 47° 23′ *np* | 6 Obs. | Diff. = 7° 11′. Excessively difficult.

The night is tolerably good, but no measures of distance can be obtained. The stars, at the time of observation, were 50 minutes west of the meridian.

The discordance between the first and two subsequent series of observations of position, is very considerable; it would seem to indicate an error in the measures obtained on the 6th of January; against *them* there is however nothing in the shape of memorandum, to be found in the rough journal; on the contrary, the night of January the 6th was one of uncommon fineness. I have tried to re-observe this star several mornings during the present and the last months, but without success; indeed, except the weather is unusually favourable, the star, with my instruments, can scarcely be recognized as double. Passy, October 22, 1825.

Mean Result.

Position 50° 48′ *np* (20 Obs.); Epoch 1825.08;
Distance 2″.982 (10 Obs.); Epoch 1825.05.

The mean of four angles in 1782 and 1783 gives 51° 47′ *np* for the position of this star (Sir W. H. MSS.) A measure in 1802 makes it 50° 1′ *np* "very exact." This star then is liable to no change of position. (H.)

No. CCCCLXXXI. R. A. $5^h\ 17^m$; Decl. $2°\ 46'$ N.

STRUVE, 180; I. 53.

Double; 8th and 12th magnitudes; small star decidedly blue, and bears but a very feeble illumination. A star of the 8th magnitude precedes it to the north.

Passy: January 6, 1825; Seven-feet Equatorial.

Position = $45°\ 28'$ *nf* | 7 Obs. | Diff. = $6°\ 1'$ } Excessively difficult.
Distance = $3''.099$ | 5 Obs. | Diff. = $0''.505$ }

Observed on the meridian. Night unusually fine. A double star of the 6th class follows this to the north, but is too faint for measures of accuracy.

Passy; February 11, 1825; Seven-feet Equatorial.

8th and 12th magnitudes.

Position = $37°\ 10'$ *nf* | 7 Obs. | Diff. = $2°\ 56'$ } Excessively difficult.
Distance = $3''.304$ | 5 Obs. | Diff. = $0''.336$ }

Stars extremely unsteady. On the meridian when observed.

Passy; February 23, 1825; Seven-feet Equatorial.

9th and 12th magnitudes.

Position = $38°\ 49'$ *nf* | 7 Obs. | Diff. = $6°\ 17'$ } Excessively difficult.
Distance = $3''.777$ | 5 Obs. | Diff. = $0''.408$ }

Observed when 35 minutes west of the meridian. The small star is decidedly light blue.

The observations of position of this double star are by no means satisfactory. The two last sets agree sufficiently well, but differ to an enormous extent with the first series; yet the night of the 6th of January was remarkably favourable for delicate observations, and there is nothing prejudicial to their accuracy entered in the rough Journal. I have tried to re-observe this double star during the present autumn, but unfavourable weather has prevented me even from *seeing* it, as a double star. Passy; October 22, 1825.

Mean Result.

Position $40°\ 29'$ *nf* (21 Obs.); Distance $3''.393$ (15 Obs.); Epoch 1825.09.

In 1783 the position was $43°\ 24'$ *nf*, and a measure in 1802 gave $44°\ 6'$ *nf* for the angle, so that no change of consequence can have taken place in this star. (H.)

No. CCCCLXXXII. R. A. $5^h\ 17^m$; Decl. 11° 28′ S.

STRUVE, 179; Hist. Cæl. 563.

Double; 10th and 10½ magnitudes; pale; ill defined stars, bearing scarcely any illumination.

Passy; January 17, 1825; Seven-feet Equatorial.

Position = 75° 36′ *sp*	5 Obs.	Diff. = 1° 11′	Extremely difficult.
Distance = 12″.978	5 Obs.	Diff. = 0″.505	

Passy; January 19, 1825; Seven-feet Equatorial.

10th and 10½ magnitudes.

Position = 76° 12′ *sp*	5 Obs.	Diff. = 1° 52′	Extremely difficult.
Distance = 11″.385	5 Obs.	Diff. = 1″.082	

Passy; February 9, 1825; Seven-feet Equatorial.

10th and 10½ magnitudes.

Distance = 11″.399 | 5 Obs. | Diff. = 1″.346. Extremely difficult.

The night is remarkably fine.

Mean Result.

Position 75° 54′ *sp*; Epoch 1825.05; Distance 11″.392; Epoch 1825.09.

(Rejecting the observations of Distance made January 17th.)

No. CCCCLXXXIII. R. A. $5^h\ 17^m$; Decl. 33° 38′ N.

Nova;

Double; 7th and 9th magnitudes; several stars in the field.

Passy; February 12, 1825; Seven-feet Equatorial.

Position = 30° 58′ *nf*	5 Obs.	Diff. = 1° 1′	Difficult.
Distance = 1′ 27″.771	5 Obs.	Diff. = 1″.034	

The small star bears a very insufficient illumination.

Passy; February 17, 1825; Seven-feet Equatorial.

8th and 9½ magnitudes.

Position = 30° 49′ *nf*	5 Obs.	Diff. = 0° 40′	Difficult.
Distance = 1′ 27″.434	5 Obs.	Diff. = 1″.563	

The small star is faint.

Mean Result.

Position 30° 53′ *nf*; Distance 1′ 27″.602; Epoch 1825.11.

No. CCCCLXXXIV. R. A. $5^h\ 18^m$; Decl. 33° 21′ N.

Nova;

Double; 8th and 8½ magnitudes.

Passy; February 12, 1825; Seven-feet Equatorial.

Position = 80° 15′ *sf*	5 Obs.	Diff. = 1° 35′
Distance = 59″.534	5 Obs.	Diff. = 0″.793

A star of the 11th magnitude is *sf* about 38° ±, and distant nearly 2½ times as far from the larger of these two stars, as they are from each other. No measures of it can be procured. Night very fine.

Passy; February 17, 1825; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 79° 47′ *sf*	5 Obs.	Diff. = 1° 2′
Distance = 58″.562	5 Obs.	Diff. = 0″.962

Passy; February 18, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Distance = 58″.646 | 3 Obs. | Diff. = 0″.288. Very difficult.

The night is become cloudy; no more observations can be procured.

Mean Result.

Position 80° 1′ *sf*; Epoch 1825.12; Distance 58″.955(13 Obs.); Epoch 1825.12.

No. CCCCLXXXV. R. A. $5^h\ 19^m$; Decl. 29° 24′ N.

Struve, 183; IV. 110.

Double; 7th and 10th magnitudes.

Passy; February 23, 1825; Seven-feet Equatorial.

Position = 82° 10′ *np*	5 Obs.	Diff. = 1° 19′	Very difficult.
Distance = 15″.261	5 Obs.	Diff. = 0″.721	

Passy; March 5, 1825; Seven-feet Equatorial.

7th and 10th magnitudes.

Position = 81° 34′ *np*	5 Obs.	Diff. = 1° 27′	Extremely difficult.
Distance = 15″.631	5 Obs.	Diff. = 0″.481	

The small star scarcely bears the most feeble illumination. Night not very favourable.

No. CCCCLXXXV. continued.

Mean Result.

Position 81° 52′ *n p*; Distance 15″.446; Epoch 1825.17.

A measure of the position of this star in 1783 gave 74° 54′ *n p*, which differs 6° 58′ from the present angle, being a change of + 0°.170 per annum, a very considerable quantity for so distant a star. However, the great difficulty of the measures must make us cautious in ascribing this to a real motion. The distance presents no sensible alteration. (H.)

No. CCCCLXXXVI. R. A. 5^h 26^m; Decl. 5° 32′ S.

θ Orionis; STRUVE, 194; III. 1.

Quintuple; A of the 6th, B the 7th, C 7¼, D of the 8th, and E of the 12th magnitudes. The four first stars form the Trapezium, in the nebula of Orion.

Measures of A B.

Blackman-street; December 27, 1823; Five-feet Equatorial.

Position = 40° 16′ *n p*	8 Obs.	Diff. = 4° 39′	}	Hazy.
Distance = 13″.293	8 Obs.	Diff. = 0″.979	}	

Blackman-street; December 29, 1823: Seven-feet Equatorial.

7th and 8th magnitudes.

Position = 40° 5′ *n p*	8 Obs.	Diff. = 2° 25′	}	Unsatisfactory.
Distance = 14″.131	3 Obs.	Diff. = 0″.192	}	

No more observations of distance can be obtained: the night is become cloudy; indeed whilst those here given were procured, the stars were only visible by glimpses, and then were very indistinct.

Blackman-street; December 30, 1823; Seven-feet Equatorial.

6th and 7th magnitudes.

Position = 41° 3′ *n p*	6 Obs.	Diff. = 2° 2′	}	Tolerably steady.
Distance = 13″.851	6 Obs.	Diff. = 1″.034	}	

No. CCCCLXXXVI. continued.

Passy; March 17, 1825; Seven-feet Equatorial.

6th and 7th magnitudes.

Position = 41° 29′ *n p* | 5 Obs. | Diff. = 1° 8′
Distance = 13″.140 | 5 Obs. | Diff. = 0″.529
} Steady.

Observed when 1½ hour west of the meridian; but the night very favourable.

Passy; March 18, 1825; Seven-feet Equatorial.

6th and 7th magnitudes.

Position = 41° 53′ *n p* | 5 Obs. | Diff. = 0° 54′
Distance = 12″.849 | 5 Obs. | Diff. = 0″.745
} Tolerably steady.

Measures of A C.

Blackman-street; January 26, 1824; Five-feet Equatorial.

6th and 7½ magnitudes.

Position = 29° 12′ *n f* | 5 Obs. | Diff. = 2° 13′
Distance = 13″.558 | 5 Obs. | Diff. = 0″.474
} Night hazy.

Blackman-street; January 27, 1824; Seven-feet Equatorial.

7th and 8½ magnitudes.

Position = 30° 39′ *n f* | 5 Obs. | Diff. = 1° 12′. Night unfavourable.
Distance = 14″.224 | 5 Obs. | Diff. = 0″.192. Stars very faint.

Passy; March 17, 1825; Seven-feet Equatorial.

6th and 7½ magnitudes.

Position = 29° 35′ *n f* | 5 Obs. | Diff. = 1° 31′
Distance = 13″.202 | 5 Obs. | Diff. = 1″.226
} Steady.

Observed when 1½ west of the meridian; but the night very favourable.

Passy; March 18, 1825; Seven-feet Equatorial.

6th and 7th magnitudes.

Position = 30° 18′ *n f* | 5 Obs. | Diff. = 2° 15′
Distance = 13″.346 | 5 Obs. | Diff. = 0″.529
} By twilight.

Observed without artificial illumination.

Measures of A D.

Blackman-street; January 26, 1824; Five-feet Equatorial.

6th and 8½ magnitudes.

Position = 76° 9′ *n p* | 5 Obs. | Diff. = 1° 25′
Distance = 17″.430 | 5 Obs. | Diff. = 0″.947
} Night unfavourable.

No. CCCCLXXXVI. continued.

Blackman-street; January 27, 1824; Seven-feet Equatorial.

6th and 8¾ magnitudes.

Position = 72° 49′ *np* | 5 Obs. | Diff. = 1° 43′
Distance = 16″.465 | 5 Obs. | Diff. = 0″.986 . . . . .

Same date; Five-feet Equatorial.

Position = 75° 33′ *np* | 6 Obs. | Diff. = 2° 8′.

Observed when two hours west of the meridian.

Passy; March 17, 1825; Seven-feet Equatorial.

6th and 8th magnitudes.

Position = 74° 52′ *np* | 5 Obs. | Diff. = 1° 39′
Distance = 16″.132 | 5 Obs. | Diff. = 1″.106 } Very steady.

Observed when two hours west of the meridian, but under favourable circumstances.

Passy; March 18, 1825; Seven-feet Equatorial.

6th and 8th magnitudes.

Position = 75° 45′ *np* | 5 Obs. | Diff. = 0° 42′
Distance = 16″.713 | 5 Obs. | Diff. = 1″.010 } Tolerably steady.

Measures of A E.

Blackman-street; December 30, 1823; Seven-feet Equatorial.

6th and 12th magnitudes.

Position = 57° 30′ *nf* ±; single observation.

Measures of distance cannot be obtained, for the small star under the slightest illumination becomes invisible.

Blackman-street; January 26, 1824; Five-feet Equatorial.

6th and 12th magnitudes.

Position = 58° 35 *nf* ±; single measure.

No observation of distance can be procured.

No. CCCCLXXXVI. continued.

Blackman-street; January 27, 1824; Five-feet Equatorial.

6th and 12th magnitudes.

Position = 59° 20′ *n f* ±; single observation.

The small star will not bear the slightest illumination; measures of distance impracticable.

Passy; March 18, 1825; Seven-feet Equatorial.

6½ and 12th magnitudes.

Distance = 1′ 59″.309 ± | 5 Obs. | Diff. = 1″.370. Excessively difficult.

The star E is also double of the 5th class; but its smaller star, which is south preceding, is so extremely faint, that although the night is unusually fine, I cannot obtain even approximate measures of it.

Passy; March 24, 1825; Seven-feet Equatorial.

6th and 12th magnitudes.

Distance = 1′ 56″.920 ± | 5 Obs. | Diff. = 0″.793. Excessively difficult.

Observations liable to some inaccuracy.

Mean Result.

of A B. Position 40° 48′ *n p* (32 Obs.); Distance 18″.453 (25 Obs.); Epoch 1824.48.

of A C. Position 29° 56′ *n f* (20 Obs.); Distance 18″.582 (20 Obs.); Epoch 1824.64.

of A D. Position 75° 8′ *n p* (26 Obs.); Distance 16″.685 (20 Obs.); Epoch 1824.64.

of A E. Position 58° 28′ *n f* ± (8 Obs.); Epoch 1824.05; Distance 1′ 58″.114 ± (10 Obs.); Epoch 1825.21.

In taking the mean, each observation has been allowed equally good.

No. CCCCLXXXVII. R. A. $5^h\ 26^m$; Decl. 21° 53′ N.

STRUVE, 192; I. 70.

Double; 9th and 9½ magnitudes.

Passy; December 29, 1824; Seven-feet Equatorial.

Position = 21° 24′ *sp*	5 Obs.	Diff. = 2° 11′	Difficult.
Distance = 3″.128	5 Obs.	Diff. = 0″.601	

Passy; January 2, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 21° 0′ *sp*	6 Obs.	Diff. = 6° 56′	Extremely difficult.
Distance = 2″.450	5 Obs.	Diff. = 0″.432	

Passy; February 2, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 22° 32′ *sp*	6 Obs.	Diff. = 3° 32′	Unsteady.
Distance = 3″.332	5 Obs.	Diff. = 0″.240	

Measures extremely difficult. Night unfavourable.

Mean Result.

Position 21° 39′ *sp* (17 Obs.); Distance 2″.970 (15 Obs.); Epoch 1825.03.

The position at the Epoch 1782.86 was 36° 24′ *sp*. A change therefore of + 14° 45′ has taken place in the angle of this star, being + 0°.350 per annum, direct, or in the direction *sp nf*. This is too large a quantity to be attributed to error of observation, and the star therefore in all probability belongs to the class of binary systems, and should be carefully watched. (H.)

No. CCCCLXXXVIII. R. A. $5^h\ 26^m$; Decl. $5°\ 34'$ S.

Seq. 1^{ma}. θ Orionis; Nova;

Double; 6th and 7th magnitudes.

Blackman-street; January 26, 1824; Five-feet Equatorial.

Position $= 2°\ 3'\ sf$ | 5 Obs. | Diff. $= 0°\ 46'$ }
Distance $= 52''.429$ | 5 Obs. | Diff. $= 1''.674$ } Night very unfavourable.

The first of these stars follows A of θ Orionis about seven seconds of time, and is about $1'\ 32''$ to the south of it.

Blackman-street; January 27, 1824; Seven-feet Equatorial.

6th and 7th magnitudes.

Position $= 1°\ 9'\ sf$ | 5 Obs. | Diff. $= 0°\ 38'$ }
Distance $= 51''.364$ | 5 Obs. | Diff. $= 0''.962$ } . . . . . .

Passy; March 24, 1825; Seven-feet Equatorial.

6th and 7th magnitudes.

Distance $= 52''.409$ | 5 Obs. | Diff. $= 0''.529$. Very steady.

Observed by twilight, without artificial illumination.

Mean Result.

(The observations of distance taken January 27, 1824, being rejected)

Position $1°\ 46'\ sf$; Epoch 1824.07; Distance $52''.418$; Epoch 1824.64.

Observations to connect this double star with θ Orionis.

Measures of A of θ, and of A of the following double star.

Passy; March 19, 1825; Seven-feet Equatorial.

Position $= 43°\ 32'\ sf$ | 5 Obs. | Diff. $= 0°\ 40'$ }
Distance $= 2'\ 14''.900$ | 5 Obs. | Diff. $= 0''.601$ } Very satisfactory.

Observed by daylight, the sun shining.

Passy; March 24, 1825; Seven-feet Equatorial.

Position $= 43°\ 41'\ sf$ | 5 Obs. | Diff. $= 0°\ 18'$ }
Distance $= 2'\ 14''.833$ | 5 Obs. | Diff. $= 0''.481$ } Very steady,

Observed by daylight; observations good.

Mean Result.

Position $43°\ 36'\ sf$ Distance $2'\ 14''.866$; Epoch 1825.22.

(The star A of the following double star being to the south of A of θ Orionis.)

No. CCCCLXXXIX. R. A. $5^h\ 26^m$; Decl. 6° 7′ S.

Præc. ι Orionis; Nova;

Double; 7th and $7\frac{1}{2}$ magnitudes. If ι Orionis be brought into the centre of the field, this double star will be found in the apparent upper part of it; a line drawn through the centres of its two stars will pass to the north of ι Orionis; its larger star precedes ι 23 seconds of time, and is about $5\frac{1}{2}$ minutes to the south of it.

Blackman-street; January 30, 1824; Five-feet Equatorial.

Position = 49° 21′ *sp* | 5 Obs. | Diff. = 1° 5′. Difficult.

The night is very bad; stars too faint for accurate measures of distance; the small star of ι Orionis is invisible.

Blackman-street; February 1, 1824; Seven-feet Equatorial.

6th and 7th magnitudes.

Position = 49° 1′ *sp* | 5 Obs. | Diff. = 0° 53′
Distance = 37″.438 | 5 Obs. | Diff. = 1″.010 } Unsatisfactory.

Stars very unsteady; night by no means good.

Blackman-street; February 9, 1824; Five-feet Equatorial.

6th and 7th magnitudes.

Distance = 36″.338 | 5 Obs. | Diff. = 0″.947. Very unsteady.

Passy; March 26, 1825; Seven-feet Equatorial.

7th and 8th magnitudes.

Distance = 37″.571 | 5 Obs. | Diff. = 0″.745. Tolerably steady.

Observed by twilight, without artificial illumination.

Mean Result.

Position 49° 11′ *sp*; Epoch 1824.08; Distance 37″.116 (15 Obs.); Epoch 1824.47.

No. CCCCXC. R. A. $5^h\ 27^m$; Decl. 5° 34′ S.

Seq. 2nda. θ Orionis; Nova;

Double; 9th and 12th magnitudes. The larger of these stars follows the bright star A of θ Orionis, about 15 seconds of time, and is about 1′ 49″ to the south of it.

Passy; February 17, 1825; Seven-feet Equatorial.

Position = 56° 3′ *s p* | 7 Obs. | Diff. = 1° 40′ } Extremely difficult.
Distance = 1′ 17″.609 | 5 Obs. | Diff. = 0″.889 }

Night clear, but the stars are unsteady.

Passy; February 23, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 55° 45′ *s p* | 5 Obs. | Diff. = 0° 56′ } Very difficult.
Distance = 1′ 17″.751 | 5 Obs. | Diff. = 1″.082 }

Mean Result.

Position 55° 56′ *s p* (12 Obs.); Distance 1′ 17″.680; Epoch 1825.21.

No. CCCCXCI. R. A. $5^h\ 27$; Decl. 6° 2′ S.

ι Orionis; STRUVE, 195; III. 12.

Triple; large, white; the small stars, particularly the nearest, decidedly blue. A of the 4th, B of the 11th or 12th, and C of the 15th magnitudes.

Measures of A B.

Blackman-street; February 1, 1824; Seven-feet Equatorial.

Position = 52° 19′ *s f* | 14 Obs. | Diff. = 7° 30′ } Extremely difficult.
Distance = 13″.518 | 6 Obs. | Diff. = 1″.202 }

Night is clear, but the stars are very unsteady.

No. CCCCXCI. continued.

Same date; Five-feet Equatorial.

Position = 52° 11′ *sf* | 8 Obs. | Diff. = 3° 37′. Very difficult.
Distance = 10″.867 | 3 Obs. | Diff. = 1″.295. Extremely difficult.

The night having become hazy, the stars are now remarkably steady. During the observations of position, the haze took off the flare of the large star, and left the small one sufficiently distinct under a good illumination; after however the position series was procured, a dense fog supervened, the small star became very indistinct, and shortly was invisible; on this account, no more measures of distance could be obtained, and those gotten are deserving of little confidence.

Blackman-street; February 9, 1824; Five-feet Equatorial.

4th and 12th magnitudes.

Distance = 11″.843 | 6 Obs. | Diff. = 0″.727.

Passy; March 5, 1825; Seven-feet Equatorial.

4th and 12th magnitudes.

Position = 50° 49′ *sf* | 5 Obs. | Diff. = 1° 33′
Distance = 12″.318 | 5 Obs. | Diff. = 1″.058 } Very unsatisfactory.

Stars excessively tremulous.

Passy; March 19, 1825; Seven-feet Equatorial.

4th and 11th magnitudes.

Position = 52° 7′ *sf* | 5 Obs. | Diff. = 2° 15″
Distance = 11″.154 | 5 Obs. | Diff. = 0″.625 } By twilight.

The sun in the horizon when these observations were commenced. The light blue colour of the small star is very distinct. No artificial illumination employed.

Measures of A C.

Blackman-street; February 1, 1824; Seven-feet Equatorial.

4th and 15th magnitudes.

Position = 13° 26′ *sf* ± | 5 Obs. | Diff. = 1° 45′
Distance = 49″.784 ± | 5 Obs. | Diff. = 1″.443 } Excessively difficult.

Measures, particularly of distance, liable to some inaccuracy.

Mean Result.

of A B, Position 51° 58′ *sf* (32 Obs.); Epoch 1824.82; Distance 12″.085 (25 Obs); Epoch 1824.64.

of A C. Position 13° 26′ *sf* ± (5 Obs.); Distance 49″.784 (5 Obs.); Epoch 1824.08.

No. CCCCXCI. continued.

The positions of B and C respectively in 1781, were 43° 51′ *sf*, and 11° 19′ *sf*, the former indicating a change of 8° 7′, and the latter of only 2° 7′. The distances have undergone little change.

Here the fixity of the more distant star may be regarded as affording presumptive evidence of a motion in the nearer one, and that to a considerable amount (+ 0″.202 per annum, or direct.) This star therefore merits attention. (H.)

No. CCCCXCII. R. A. $5^h\ 27^m$; Decl. 30° 22′ N.

26 Aurigæ; STRUVE, 196; III. 64;

Double; 6th and 10th magnitudes; small, blue.

Passy; December 29, 1824: Seven-feet Equatorial.

Position = 1° 45′ *sp*	6 Obs.	Diff. = 1° 28′	}	Difficult.
Distance = 12″.265	5 Obs.	Diff. = 0″.456	}	

After these measures were secured, the position wire was purposely set to zero. The small star is decidedly above the wire, whilst the larger one remains bisected by it, during their progress across the field. Night very favourable; it freezes slightly.

Passy; January 25, 1825; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = 1° 32′ *sp*	6 Obs.	Diff. = 0° 53′	}	Very difficult.
Distance = 12″.388	5 Obs.	Diff. = 0″.913	}	

Mean Result.

Position 1° 38′ *sp* (12 Obs.); Distance 12″.327 (10 Obs.); Epoch 1825.03.

In 1783 the position is stated (MSS.) to have been 2° 36′ *np*, and the distance 13″.41. In 1802 the angle was measured at 3° 56′ *np*, but (for reasons assigned), this was regarded at the time as a manifestly false measure, and the small star was judged to be exactly preceding. The total change of angle is 4° 14′, a considerable quantity for mere error of observation in a star of the 3d class, and which (when the observation of 1802 is considered), may lead to a suspicion of a very slow relative motion. (H.)

No. CCCCXCIII. R. A. $5^h\ 30^m$; Decl. 0° 15′ S.

Nova;

Two double stars in the field. The preceding is of the 6th class; the following of the 2nd or 3rd.

The preceding.

Passy; December 29, 1824; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 7° 59′ *sp*	5 Obs.	Diff. = 0° 48′	Difficult.
Distance = 2′ 17″.982	5 Obs.	Diff. = 0″.986	

Passy; January 16, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 8° 17′ *sp* | 3 Obs. | Diff. = 0° 40′. Very difficult.

Night is become cloudy.

Passy; January 17, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 8° 14′ *sp*	5 Obs.	Diff. = 0° 24′	Very difficult.
Distance = 2′ 18″.653	5 Obs.	Diff. = 1″.106	

The small star is very faint, and bears only the most feeble illumination.

Mean Result.

Position 8° 9′ *sp* (13 Obs.); Epoch 1825.03;

Distance 2′ 18″.317; (10 Obs.); Epoch 1825.02.

No. CCCCXCIV. R. A. $5^h\ 30^m$; Decl. 0° 15′ S.

Nova; sequens No. 493;

Double; 10 and 10½ magnitudes; both pale blue, and bear scarcely any illumination.

Passy; December 29, 1824; Seven-feet Equatorial.

Position = 28° 45′ *np*	5 Obs.	Diff. = 2° 35′	Extremely difficult.
Distance = 11″.491	5 Obs.	Diff. = 1″.731	

No. CCCCXCIV. continued.

Passy; January 25, 1825; Seven-feet Equatorial.

10th and 10½ magnitudes.

Position = 26° 58′ *sp*	5 Obs.	Diff. = 2° 27′	Extremely difficult.
Distance = 11″.555	5 Obs.	Diff. = 0″.986	

Neither star bears a good illumination. Night fine.

Mean Result.

Position 27° 51′ *np*; Distance 11″.523; Epoch 1825.03.

No. CCCCXCV. R. A. 5ʰ 30ᵐ; Decl. 29° 25′ N.

STRUVE, 197; Hist. Cæl. 260;

Double; 7 and 7½ magnitudes.

Blackman-street; December 22, 1823; Five-feet Equatorial.

Position = 77° 7′ *nf*	5 Obs.	Diff. = 1° 0′	. . . . .
Distance = 26″.270	5 Obs.	Diff. = 0″.758	

Passy; December 22, 1824; Seven-feet Equatorial.

7 and 7½ magnitudes.

Position = 77° 17′ *nf*	5 Obs.	Diff. = 0° 53′	. . . . .
Distance = 26″.732	5 Obs.	Diff. = 0″.168	

Mean Result.

Position 77° 12′ *nf*; Distance 26″.501; Epoch 1824.48.

No. CCCCXCVI. R. A. 5ʰ 30ᵐ; Decl. 15° 15′ N.

STRUVE, 199; Hist. Cæl. 262;

Double; 8th and 10th magnitudes; small, blue, and bears a very tolerable illumination.

Passy; December 10, 1824; Seven-feet Equatorial.

Position = 4° 54′ *sp*	5 Obs.	Diff. = 1° 45′	On the meridian.
Distance = 9″.752	5 Obs.	Diff. = 0″.408	

No. CCCCXCVI. continued.

Passy; January 25, 1825; Seven-feet Equatorial.

8½ and 9½ magnitudes.

Position = 4° 44′ *np*	5 Obs.	Diff. = 1° 18′	. . . . .
Distance = 9″.983	5 Obs.	Diff. = 0″.553	

Mean Result.

Position 4° 49′ *np*; Distance 9″.867; Epoch 1825.00.

No. CCCCXCVII. R. A. 5h 37m; Decl. 4° 20′ S.

187 (Bode) Orionis; Struve, 204;

Double; 7th and 12th, or 15th magnitudes; the small star will not bear the least illumination.

Passy; January 6, 1825; Seven-feet Equatorial.

Position = 2° 48′ *nf*	5 Obs.	Diff. = 3° 23′	On the meridian.
Distance = 8″.048	5 Obs.	Diff. = 0″.529	

The night is remarkably fine, and the stars are extremely steady; still the measures of this double star are so excessively difficult, that the observations of it, although made with every possible care, may be liable to error. To attempt to measure it, except under the most favourable circumstances, will always be useless.

I had often looked attentively for this small star, both here and in England, fully persuaded from the authority of Mr. Struve* that it existed; but till this evening, it does not appear from my Observatory Journal, that I have even once suspected that I saw it.

Passy; February 6, 1825; Seven-feet Equatorial.

7th and 15th magnitudes.

Position = 3° 26′ *nf*	5 Obs.	Diff. = 0° 34′	Excessively difficult.
Distance = 7″.287	5 Obs.	Diff. = 0″.625	

Night very favourable for delicate observations; still the extreme faintness of the small star renders the measures open to suspicion.

Mean Result.

Position 3° 7′ *nf*; Distance 7″.667; Epoch 1825.06.

* Mr. Struve's catalogue contains the places of several stars called *double* by Piazzi; in numerous instances however, I am satisfied that Piazzi's instrument has deceived him.

No. CCCCXCVIII. R. A. $5^h\ 37^s$; Decl. 22° 31′ S.

γ Leporis; V. 50.

Double; 5th and 8th magnitudes.

Passy; January 2, 1825; Seven-feet Equatorial.

Position = 79° 42′ *n p*	5 Obs.	Diff. = 0° 41′
Distance = 1′ 33″.182	6 Obs.	Diff. = 1″.154

Passy; January 19, 1825; Seven-feet Equatorial.

6th and 8th magnitudes.

Position = 79° 9′ *n p*	5 Obs.	Diff. = 0° 24′
Distance = 1′ 34″.553	5 Obs.	Diff. = 1″.370

Passy; February 5, 1825; Seven-feet Equatorial.

5th and 8th magnitudes.

Distance = 1′ 33″.928	5 Obs.	Diff. = 0″.745.

Mean Result.

Position 79° 25′ *n p* (10 Obs.); Epoch 1825.03;

Distance 1′ 33″.844 (16 Obs.); Epoch 1825.05.

Sir W. HERSCHEL has no measures of this star, and there is even a doubt of its identity with V. 50. (H.)

No. CCCCXCIX. R. A. $5^h\ 38^m$; Decl. 6° 23′ N.

52 Orionis; STRUVE, 207; I. 20.

Double; equal; each of the 8th magnitude.

Blackman-street; March 6, 1824; Five-feet Equatorial.

Position = 68° 25′ *s p* or *n f*	5 Obs.	Diff. = 2° 49′
Distance = 1″.651	2 Obs.	Diff. = 0″.474

Blackman-street; March 12, 1824; Five-feet Equatorial.

Equal; each of the 8th magnitude.

Position = 70° 13′ *s p* or *n f*	5 Obs.	Diff. = 3° 6′	Very unsteady.
Distance = 1″.655	5 Obs.	Diff. = 0″.569	

These stars are separated with 133, but are best observed with 303; the night is very clear.

No. CCCCXCIX. continued.

Mean Result.

Position 69° 19′ *sp* or *nf*; Distance 1″.654; Epoch 1824.18.

This star has not undergone the slightest change. In 1781 its position was 69° 41′ *sp*; in 1802 it was 69° 57′ *sp*; and its distance appears in like manner to remain perfectly unaltered. (H.)

No. D. R. A. $5^h\ 38^m$; Decl. 32° 56′ N.

STRUVE, 206; Hist. Cæl. 209;

Double; 9th and 10th magnitudes.

Passy; January 6, 1825; Seven-feet Equatorial.

Position = 1° 19′ *nf*	5 Obs.	Diff. = 0° 48′	} Difficult.
Distance = 58″.738	5 Obs.	Diff. = 0″.817	

Passy; January 28, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 0° 58′ *nf*	5 Obs.	Diff. = 0° 39′	} Difficult.
Distance = 59″.856	5 Obs.	Diff. = 0″.529	

Passy; February 5, 1825; Seven-feet Equatorial.

Position = 1° 1′ *nf*	5 Obs.	Diff. = 0° 30′	} Difficult.
Distance = 59″.786	5 Obs.	Diff. = 0″.577	

Mean Result.

Position 1° 6′ *nf* (15 Obs.); Distance 59″.460; (15 Obs.); Epoch 1825.06.

No. DI. R. A. $5^h\,40'$; Decl. $8°\,28'$ S.

Nova;

Double; 7th and 11th magnitudes.

Passy; March 8, 1825; Seven-feet Equatorial.

Position $= 87°\,34'$ *sp*	5 Obs.	Diff. $= 1°\,47'$	Extremely difficult.
Distance $= 21''.387 \pm$	(single observation)		

The night is become very bad; no more measures can be gotten; and the accuracy of these perhaps may be called in question.

Passy; March 10, 1825; Seven-feet Equatorial.

7th and 12th magnitudes.

Position $= 88°\,13'$ *sp*	5 Obs.	Diff. $= 0°\,46'$	Excessively difficult.
Distance $= 21''.615 \pm$	3 Obs.	Diff. $= 1''.202$	

The small star will scarcely bear the slightest illumination.

Mean Result.

Position $87°\,54'$ *sp* (10 Obs.); Distance $21''.558 \pm$ (4 Obs.); Epoch 1825.18.

No. DII. R. A. $5^h\,45^m$; Decl. $13°\,50'$ N.

STRUVE, 210; Hist. Cæl. 313.

Double; 8th and 9th magnitudes.

Passy; January 6, 1825; Seven-feet Equatorial.

Position $= 39°\,14'$ *sf*	5 Obs.	Diff. $= 0°\,39'$	. . . . .
Distance $= 45''.171$	5 Obs.	Diff. $= 0''.577$	

Passy; January 19, 1825; Seven-feet Equatorial.

7th and 8th magnitudes.

Position $= 39°\,7'$ *sf*	5 Obs.	Diff. $= 2°\,8'$	. . . . .
Distance $= 45''.878$	5 Obs.	Diff. $= 0''.865$	

Mean Result.

Position $39°\,10'$ *sf*; Distance $45''.524$; Epoch 1825.03.

No. DIII. R. A. $5^h\ 46^m$; Decl. 13° 55′ N.

Nova;

Double; 7th and 9th magnitudes; a star C of the 8th magnitude precedes it to the north.

Measures of A B.

Passy; January 19, 1825; Seven-feet Equatorial.

Position = 43° 37′ *sf* | 5 Obs. | Diff. = 1° 6′
Distance = 39″.880 | 5 Obs. | Diff. = 2″.212 . . . . . .

Passy; February 4, 1825; Seven-feet Equatorial.

7th and 9th magnitudes.

Position = 44° 42′ *sf* | 5 Obs. | Diff. = 1° 13′
Distance = 40″.212 | 5 Obs. | Diff. = 0″.962 . . . . . .

The small star is certainly blue.

Measures of A C.

Passy; January 19, 1825; Seven-feet Equatorial.

7th and 8th magnitudes.

Position = 67° 13′ *np* | 3 Obs. | Diff. = 0° 22′. . . . . .

Passy; February 4, 1825; Seven-feet Equatorial.

7th and 9th magnitudes.

Position = 67° 19′ *np* | 5 Obs. | Diff. = 0° 43′
Distance = 3′ 21″.712 | 5 Obs. | Diff. = 1″.130 . . . . . .

Passy; March 26, 1825; Seven-feet Equatorial.

7th and 8th magnitudes.

Distance = 3′ 21″.817 | 5 Obs. | Diff. = 1″.082. . . . . .

Mean Result.

of A B. Position 44° 9′ *sf*; Distance 39″.946; Epoch 1825.07;

of A C. Position 67° 17′ *np* (8 Obs.): Epoch 1825.07;
Distance 3′ 21″.764; Epoch 1825.16.

No. DIV. R. A. $5^h\ 51^m$; Decl. 20° 10′ S.

STRUVE, 215; Hist. Cæl. 319.

Double; equal; each of the 10th magnitude.

Passy; January 6, 1825; Seven-feet Equatorial.

Position = 12° 22′ *sp* or *nf*	5 Obs.	Diff. = 2° 0′	Excessively difficult.
Distance = 5″.253	5 Obs.	Diff. = 0″.962	

These are pale, ill defined stars, bearing neither illumination nor magnifying power: till now I have only seen it as a *single* star: finding the measures difficult with 179, I tried 105; but although the stars were then distinctly separated, the instant sufficient light was admitted to render the micrometer wires perceptible, both stars became invisible. The measures (perhaps little better than cautious estimations) were gotten with the ordinary power of 179. The night is particularly favourable.

I have tried to re-measure this double star several times; but although the weather has occasionally been very fine, I have not succeeded in seeing it *double*.

Passy; April 30, 1825.

No. DV. R. A. $5^h\ 58^m$; Decl. 14° 2′ N.

Nova; in the field with Nos. 506 and 507;

Double; 9th and 9½ magnitudes.

Passy; January 28, 1825; Seven-feet Equatorial.

Position = 85° 19′ *nf*	5 Obs.	Diff. = 3° 10′	Very difficult.
Distance = 24″.231	5 Obs.	Diff. = 0″.889	

Passy; February 4, 1825; Seven-feet Equatorial.

9½ and 10th magnitudes.

Position = 84° 9′ *nf*	5 Obs.	Diff. = 1° 5′	Very difficult.
Distance = 25″.092	5 Obs.	Diff. = 0″.793	

Passy; March 29, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 82° 58′ *nf*	5 Obs.	Diff. = 1° 39′	Very difficult.
Distance = 24″.664	5 Obs.	Diff. = 1″.803	

Observed when 2½ hours west of the meridian.

Mean Result.

Position 84° 9′ *nf* (15 Obs.); Distance 24″.662 (15 Obs.);

Epoch 1825.13.

No. DVI. R. A. $5^h\ 59^m$; Decl. 14° 0′ N.

Nova;

Double; 8th and 10th magnitudes.

Passy; January 28, 1825; Seven-feet Equatorial.

Position = 19° 53′ *sf*	5 Obs.	Diff. = 2° 53′	Difficult.
Distance = 2″.202	5 Obs.	Diff. = 0″.769	

Night remarkably fine; but the moisture deposited on the object-glass is sadly troublesome: it is absolutely necessary to remove it every three or four minutes for the purpose of wiping it.

Passy; February 11, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 19° 14′ *sf*	5 Obs.	Diff. = 1° 46′	Difficult.
Distance = 2″.928	5 Obs.	Diff. = 0″.336	

Passy; March 10, 1825; Portable Transit.

Observed R. A. of the larger star = $5^h\ 58'\ 36''.86$.

Passy; March 29, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Distance = 3″.120 | 5 Obs. | Diff. = 0″.456. Difficult.

Observed when two hours west of the meridian.

Mean Result.

Position 19° 33′ *sf* (10 Obs.); Epoch 1825.09;
Distance 2″.750 (15 Obs.); Epoch 1825.12.

No. DVII. R. A. $5^h\ 59^m$; Decl. 14° 0′ N.

Nova;

Double; 9th and 9½ magnitudes. The larger of these stars follows the double star, No. 506, two or three seconds of time, and is about 14 seconds to the south of it.

Passy; Jauuary 28, 1825; Seven-feet Equatorial.

Position = 47° 24′ *sp*	5 Obs.	Diff. = 1° 59′	. . . . .
Distance = 39″.331	5 Obs.	Diff. = 0″.913	

No. DVII. continued,

Passy; February 4, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 47° 43′ *sp* | 5 Obs. | Diff. = 1° 22′
Distance = 40″.062 | 5 Obs. | Diff. = 1″.443

Mean Result.

Position 47° 33′ *sp*; Distance 39″.696; Epoch 1825.08.

No. DVIII. R. A. 6ʰ 0ᵐ; Decl. 2° 32′ N.

STRUVE, 216;

Double; 7th and 8th magnitudes.

Passy; December 5, 1824; Seven-feet Equatorial.

Position = 22° 21′ *sf* | 5 Obs. | Diff. = 0° 40′
Distance = 28″.377 | 5 Obs. | Diff. = 0″.913

Passy; December 10, 1824; Seven-feet Equatorial.

7½ and 8th magnitudes.

Position = 22° 57′ *sf* | 5 Obs. | Diff. = 0° 53′
Distance = 29″.997 | 5 Obs. | Diff. = 0″.721

Passy; February 5, 1825; Seven-feet Equatorial.

7½ and 8th magnitudes.

Distance = 29″.187 | 5 Obs. | Diff. = 0″.577.

Measures of a distant star of the 12th magnitude.

Passy; February 5, 1825; Seven-feet Equatorial.

Position = 16° 28′ *sf* | Single observation
Distance = 2′ 1″.060 | Single observation
} Epoch 1825.09

Mean Result.

Position 22° 39′ *sf* (10 Obs.); Epoch 1824.94;
Distance 29″.187 (15 Obs.); Epoch 1824.99.

No. DIX. R. A. $6^h\ 4^m$; Decl. 14° 26′ N.

Nova; *s p* No. 510;

Double; 7th and $7\frac{1}{2}$ magnitudes.

Passy; January 17, 1825; Seven-feet Equatorial.

Position = 71° 58′ *s p*	5 Obs.	Diff. = 0° 37′
Distance = 2′ 49″.146	5 Obs.	Diff. = 1″.106

Passy; February 2, 1825; Seven-feet Equatorial.

8th and $8\frac{1}{2}$ magnitudes.

Position = 71° 57′ *s p*	5 Obs.	Diff. = 0° 21′
Distance = 2′ 48″.732	5 Obs.	Diff. = 1″.298

Mean Result.

Position 71° 57′ *s p*; Distance 2′ 48″.939; Epoch 1825.06.

No. DX. R. A. $6^h\ 4^m$; Decl. 14° 32′ N.

STRUVE, 219; Hist. Cæl. 313.

Triple; A of the $8\frac{1}{2}$, B 9th, and C of the 12th magnitudes.

Measures of A B.

Passy; December 29, 1824; Seven-feet Equatorial.

Position = 6° 20′ *s p*	5 Obs.	Diff. = 1° 29′
Distance = 5″.922	5 Obs.	Diff. = 0″.553

South preceding this star, in the field with it, is a double star of the 6th class; and north following also a triple star of the 5th and 6th classes: they may be measured when the weather is favourable.

Passy; January 17, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 7° 6′ *s p*	5 Obs.	Diff. = 1° 36′
Distance = 5″.939	5 Obs.	Diff. = 0″.456

No. DX. continued.

Measures of A C.

Passy; December 29, 1824; Seven-feet Equatorial.

8½ and 12th magnitudes.

Position = 64° 44′ *nf*	5 Obs.	Diff. = 0° 25′	Very difficult.
Distance = 1′ 47″.533	5 Obs.	Diff. = 1″.611	

Passy; March 30, 1825; Seven-feet Equatorial.

8th and 12th magnitudes.

Position = 64° 41′ *nf*	3 Obs.	Diff. = 0° 31′	Extremely difficult.
Distance = 1′ 48″.457	3 Obs.	Diff. = 0″.505	

Observed when 2½ hours west of the meridian.

Mean Result.

of A B. Position 6° 4′ *sp*; Distance 5″.930; Epoch 1825.02;
of A C. Position 64° 4′ *nf* (8 Obs.); Distance 1′ 47″.879 (8 Obs.); Epoch 1825.12.

No. DXI. R. A. 6ʰ 4ᵐ; Decl. 36° 12′ N.

STRUVE, 218; Hist. Cæl. 315.

Double; 7½ and 8th magnitudes.

Passy; December 29, 1824; Seven-feet Equatorial.

Position = 54° 55′ *sp*	5 Obs.	Diff. = 1° 31′	. . . . .
Distance = 11″.991	5 Obs.	Diff. = 0″.625	

Passy; December 31, 1824; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 53° 31′ *sp*	5 Obs.	Diff. = 1° 15′	Very tremulous.
Distance = 11″.318	5 Obs.	Diff. = 0″.336	

Stars only visible by glimpses. Cloudy.

Mean Result.

Position 54° 13′ *sp*; Distance 11″.654; Epoch 1825.00.

No. DXII. R. A. $6^h\ 7^m$; Decl. 47° 11′ N.

STRUVE, 220; Hist. Cæl. 383.

Double; 9½ and 10th magnitudes.

Passy; January 2, 1825; Seven-feet Equatorial.

Position = 0° 39′ *s p*	5 Obs.	Diff. = 1° 10′	Difficult.
Distance = 8″.374	5 Obs.	Diff. = 1″.370	

Passy; January 25, 1825; Seven-feet Equatorial.

10th and 10½ magnitudes.

Position = 0° 25′ *s p*	5 Obs.	Diff. = 0° 40′	Very difficult.
Distance = 8″.103	5 Obs.	Diff. = 0″.962	

These stars are so extremely obscure, that the observations of distance may be liable to some error.

Mean Result.

Position 0° 32′ *s p*; Distance 8″.238; Epoch 1825.03.

No. DXIII. R. A. $6^h\ 11^m$; Decl. 21° 14′ N.

Nova;

Double; 8th and 9½ magnitudes; small, blue.

Passy; February 12, 1825; Seven-feet Equatorial.

Position = 12° 47′ *s p*	5 Obs.	Diff. = 0° 56′	Difficult.
Distance = 59″.322	5 Obs.	Diff. = 0″.937	

The small star does not bear a good illumination.

Passy; February 17, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 12° 53′ *s p*	5 Obs.	Diff. = 1° 37′	Difficult.
Distance = 58″.505	5 Obs.	Diff. = 0″.481	

Small star very faint.

Mean Result.

Position 12° 50′ *s p*; Distance 58″.913; Epoch 1825.11.

No. DXIV. R. A. $6^h\ 11^m$; Decl. 58° 30′ N.

5 Lyncis; STRUVE, 221; VI. 102.

Double; 6th and 9th magnitudes; small, blue.

Passy; January 5, 1825; Seven-feet Equatorial.

Position = 2° 5′ *n p*	5 Obs.	Diff. = 0° 51′
Distance = 1′ 36″.640	5 Obs.	Diff. = 0″.745

Passy; February 4, 1825; Seven-feet Equatorial.

7th and 9th magnitudes.

Position = 2° 9′ *n p*	5 Obs.	Diff. = 0° 27′
Distance = 1′ 34″.383	5 Obs.	Diff. = 1″.370

Passy; February 6, 1825; Seven-feet Equatorial.

7th and 9th magnitudes.

Distance = 1′ 35″.312 | 5 Obs. | Diff. = 0″.793.

Mean Result.

Position 2° 7′ *n p* (10 Obs.); Epoch 1825.05;

Distance 1′ 35″.445 (15 Obs.); Epoch 1825.06.

The position of 1783 was 2° 0′ *n p*, so that this star appears perfectly unchanged in this respect. As for the distance, nothing can be concluded for reasons already stated. (H.)

No. DXV. R. A. $6^h\ 12^m$; Decl. 26° 47′ N.

Nova;

Double; 9th and $9\frac{1}{2}$ magnitudes; bear but a feeble illumination.

Passy; February 12, 1825; Seven-feet Equatorial.

Position = 78° 36′ *n p*	5 Obs.	Diff. = 0° 19′	Difficult.
Distance = 18″.860	5 Obs.	Diff. = 0″.793	

Passy; February 19, 1825; Seven-feet Equatorial.

9th and $9\frac{1}{2}$ magnitudes.

Position = 78° 45′ *n p*	5 Obs.	Diff. = 1° 45′	Very difficult.
Distance = 19″.139	5 Obs.	Diff. = 0″.721	

Mean Result.

Position 78° 40′ *n p*; Distance 18″.999; Epoch 1825.12.

No. DXVI. R. A. $6^h\ 12^m$; Decl. 24° 53′ S.

Nova;

Double; $8\frac{1}{2}$ and $9\frac{1}{2}$ magnitudes; a star C of the 6th magnitude precedes A to the south.

Measures of A B.

Passy; March 5, 1825; Seven-feet Equatorial.

Position = 87° 2′ *nf* | 5 Obs. | Diff. = 0° 57′
Distance = 1′ 6″.404 | 5 Obs. | Diff. = 1″.082 } Difficult.

Passy; March 10, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 87° 9′ *nf* | 5 Obs. | Diff. = 0° 53′
Distance = 1′ 6″.139 | 5 Obs. | Diff. = 0″.721 } Extremely difficult.

The small star bears but the most feeble illumination.

Measures of A C.

$8\frac{1}{2}$ and 6th magnitudes.

Passy; March 5, 1825; Seven-feet Equatorial.

Distance = 27° 57′ *sp*. Single Observation.

Passy; March 10, 1825; Seven-feet Equatorial.

Position = 27° 39′ *sp* | 3 Obs. | Diff. = 0° 14′
Distance = 5′ 0″.048 | 3 Obs. | Diff. = 1″.659 . . . . .

Passy; March 28, 1825; Seven-feet Equatorial.

Distance = 4′ 59″.902 | 3 Obs. | Diff. = 1″.178. By twilight.

Observed without artificial illumination.

Mean Result.

Of A B. Position 87° 5′ *nf*; Distance 1′ 6″.271; Epoch 1825.18.

Of A C. Position 27° 48′ *sp* (4 Obs.); Epoch 1825.18; Distance 4′ 59″.975 (6 Obs.); Epoch 1825.21.

No. DXVII. R. A. $6^h\ 14^m$; Decl. 16° 32′ S.

Nova;

Double; 10 and $10\frac{1}{2}$ magnitudes.

Passy; February 23, 1825; Seven-feet Equatorial.

Position = 77° 17′ *sp* | 5 Obs. | Diff. = 2° 24′
Distance = 23″.748 | 5 Obs. | Diff. = 1″.707 } Very difficult.

Neither star bears sufficient illumination; I rather suspect the accuracy of the distance.

Passy; March 10, 1825; Seven-feet Equatorial.

Equal; each of the 11th magnitude.

Position = 78° 8′ *sp* or *nf* | 5 Obs. | Diff. = 1° 40′
Distance = 23″.912 | 5 Obs. | Diff. = 0″.962 } Extremely difficult.

Mean Result.

Position 77° 42′ *sp* or *nf*; Distance 23″.830; Epoch 1825.16.

No. DXVIII. R. A. $6^h\ 16^m$; Decl. 16° 8′ S.

STRUVE, 223; Hist. Cæl. 323;

Double; 8th and 10th magnitudes; small, blue.

Passy; January 2, 1825; Seven-feet Equatorial.

Position = 0° 40′ *nf* | 5 Obs. | Diff. = 1° 47′
Distance = 15″.462 | 5 Obs. | Diff. = 1″.082 } Very difficult.

The small star bears only a very feeble illumination.

Passy; January 25, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 0° 16′ *nf* | 5 Obs. | Diff. = 0° 39′
Distance = 15″.739 | 5 Obs. | Diff. = 0″.769 } Very difficult.

A double star of the 5th class is also in the field *sp*, but it is unmeasurable with this instrument. Night fine.

Mean Result.

Position 0° 28′ *nf*; Distance 15″.600; Epoch 1825.03.

No. DXIX. R. A. $6^h\ 19^m$; Decl. 52° 35′ N.

229 (Bode) Aurigæ; Hist. Cæl. 375; Struve, 226.

Double; 8th and 10th magnitudes. The small star bears a very good illumination.

Passy; February 8, 1825; Seven-feet Equatorial.

Distance = 5″.150 | 5 Obs. | Diff. = 0″.216.

Passy; March 19, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 48° 54′ *n p* | 5 Obs. | Diff. = 5° 54′
Distance = 5″.102 | 5 Obs. | Diff. = 0″.360 } Very difficult.

One third, perhaps one half, of the object-glass is not in use, through the interference of the timbers of the Observatory.

Passy; March 21, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 49° 58′ *n p* | 5 Obs. | Diff. = 3° 15′
Distance = 5″.357 | 5 Obs. | Diff. = 0″.264 } Difficult.

Mean Result.

Position 49° 26′ *n p*; Epoch 1825.16; Distance 5″.223 (15 Obs.); Epoch 1825.17.

No. DXX. R. A. $6^h\ 19^m$; Decl. 5° 24′ N.

Struve, 225; II. 89.

Double; 8th and 10th magnitudes; small, blue; and bears but the slightest illumination.

Passy; January 2, 1825; Seven-feet Equatorial.

Position = 50° 8′ *n f* | 7 Obs. | Diff. = 4° 48′
Distance = 6″.811 | 5 Obs. | Diff. = 0″.456 } Very difficult.

Passy; January 28, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 50° 47′ *n f* | 7 Obs. | Diff. = 4° 45′
Distance = 7″.117 | 5 Obs. | Diff. = 0″.312 } Extremely difficult.

The dew deposited on the object-glass is excessively troublesome.

No. DXX. continued.

Mean Result.

Position 50° 27′ *nf* (14 Obs.); Distance 6″.964 (10 Obs.);
Epoch 1825.04.

This star offers not the slightest ground for presumption of a change, the position in 1784 having been 50° 51′ *nf*, and the distance (from the estimation in diameters) about 7″. (H.)

No. DXXI. R. A. 6^h 22^m; Decl. 38° 40′ N.

STRUVE, 232; Hist. Cæl. 208.

Double; 9th and 11th magnitudes.

Passy; January 2, 1825; Seven-feet Equatorial.

Position = 42° 8′ *sf*	8 Obs.	Diff. = 3° 48′	}	Extremely difficult.
Distance = 3″.200	5 Obs.	Diff. = 0″.697	}	

Passy; February 9, 1825; Seven-feet Equatorial.

9th and 11th magnitudes.

Position = 43° 44′ *sf*	8 Obs.	Diff. = 2° 30′	}	Very difficult.
Distance = 4″.027	5 Obs.	Diff. = 0″.529	}	

Stars admirably defined, and are as steady as possible.

Mean Result.

Position 42° 56′ *sf* (16 Obs.); Distance 3″.613;
Epoch 1825.05.

No. DXXII. R. A. 6^h 22^m; Decl. 5° 58′ N.

STRUVE, 231; III. 75.

Double; 8th and 12th magnitudes; small, blue, and scarcely bears the least illumination.

Passy; January 2, 1825; Seven-feet Equatorial.

Position = 14° 24′ *np*	5 Obs.	Diff. = 3° 45′	}	Extremely difficult.
Distance = 10″.586	5 Obs.	Diff. = 0″.601	}	

No. DXXII. continued.

Passy; February 5, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 16° 27′ *np*	5 Obs.	Diff. = 1° 26′	Very difficult.
Distance = 10″.962	5 Obs.	Diff. = 0″.312	

The small star is decidedly blue, and bears only a very feeble illumination.

Mean Result.

Position 15° 25′ *np*; Distance 10″.774; Epoch 1825.04.

Sir W. HERSCHEL has no measures of this star. (H.)

No. DXXIII. R. A. $6^h\ 22^m$; Decl. 11° 22′ N.

145, 2; or Nova?

Double; 7th and 12th magnitudes; small, blue.

Passy; February 5, 1825; Seven-feet Equatorial.

Position = 85° 24′ *nf*	5 Obs.	Diff. = 1° 16′	Excessively difficult.
Distance = 16″.668	5 Obs.	Diff. = 1″.106	

Passy; February 9, 1825; Seven-feet Equatorial.

7th and 10th magnitudes.

Position = 85° 2′ *nf*	5 Obs.	Diff. = 1° 45′	Extremely difficult.
Distance = 17″.097	5 Obs.	Diff. = 0″.769	

Mean Result.

Position 85° 13′ *nf*; Distance 16″.882; Epoch 1825.09.

No. DXXIV. R. A. $6^h\ 23^m$; Decl. 22° 15′ N.

STRUVE, 283; MAYER;

Triple; A 7th, B $7\frac{1}{2}$, and C of the 12th or 15th magnitudes.

Measures of A B.

Passy; December 5, 1824; Seven-feet Equatorial.

Position = 27° 14′ *sp*	5 Obs.	Diff. = 0° 40′	. . . . .
Distance = 53″.292	5 Obs.	Diff. = 0″.793	

No. DXXIV. continued.

Passy; December 31, 1824; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 27° 10′ *sp* | 5 Obs. | Diff. = 0° 56′
Distance = 52″.784 | 5 Obs. | Diff. = 1″.539
} Ill defined, and unsteady.

Passy; January 8, 1825; Seven-feet Equatorial.

7th and 7½ magnitudes.

Distance = 53″.008 | 5 Obs. | Diff. = 0″.793. . . . . .

Passy; January 17, 1825; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 27° 8′ *sp* | 5 Obs. | Diff. = 1° 36′
Distance = 54″.038 | 5 Obs. | Diff. = 0″.432
} Very hazy.

Night very unfavourable; of A C no measures can be procured.

Measures of A C.

Passy; December 5, 1824; Seven-feet Equatorial.

7th and 12th, or 15th magnitudes.

Position = 59° 39′ *sf* | 2 Obs | Diff. = 0° 18′
Distance = 1′ 46″.511 ± single observation
} Excessively difficult.

The star C bears no illumination: the distance is little better than conjecture.

Mean Result.

of A B. Position 27° 11′ *sp* (15 Obs.); Epoch 1824.99;
Distance 53″.280 (20 Obs.); Epoch 1825.00.

of A C. Position 59° 39′ *sf*; Distance 1′ 46″.511;
Epoch 1824.93.

No. DXXV. R. A. $6^h\ 24^m$; Decl. 41° 15′ N.

145, 60; or Nova?

Double; 10th and 11th magnitudes.

Passy; February 5, 1825; Seven-feet Equatorial.

Position = 16° 29′ *nf* | 5 Obs. | Diff. = 1° 40′
Distance = 24″.787 | 5 Obs. | Diff. = 0″.745
} Extremely difficult.

Passy; February 11, 1825; Seven-feet Equatorial.

10th and 11th magnitudes.

Position = 15° 36′ *nf* | 5 Obs. | Diff. = 0° 46′
Distance = 26″.106 | 5 Obs. | Diff. = 0″.456
} Extremely difficult.

Passy; March 26, 1825; Seven-feet Equatorial.

10th and 11th magnitudes.

Position = 16° 26′ *nf* | 5 Obs. | Diff. = 1° 18′
Distance = 25″.861 | 5 Obs. | Diff. = 0″.793
} Extremely difficult.

Mean Result.

Position 16° 10′ *nf* (15 Obs.); Distance 25″.585 (15 Obs.); Epoch 1825.14.

The measures of distance do not accord so well as might be wished; still the observations are so very difficult, that I scarcely dare to reject those of February 5.

No. DXXVI. R. A. $6^h\ 26^m$; Decl. 41° 43′ N.

STRUVE, 234; I. 84.

A very close double star; 9th and 10th magnitudes. A power of 303 with the Five-feet Equatorial distinctly separates the two stars, and 133 shows it double: it is excessively difficult to measure; bears magnifying but badly; and although the night is tolerably fine, is unmeasurable with the Five-feet.

Blackman-street; January 31, 1824; Seven-feet Equatorial.

Position = 3° 50′ *nf* | 5 Obs. Diff. = 1° 30′
Distance = 1″.820 | 3 Obs. | Diff. = 0″.481
} Excessively difficult.

No. DXXVI. continued.

Passy; February 6, 1825; Seven-feet Equatorial.

Position = 5° 26′ *nf*	5 Obs.	Diff. = 4° 42′	With power 273
Position = 5° 41′ *nf*	5 Obs.	Diff. = 7° 15′	With 179
Distance = 1″.570	5 Obs.	Diff. = 0″.408	

These stars are of a light blue colour; they are very close, bear but very little illumination, and are not well defined under sufficient magnifying power, to separate their discs completely from each other. The first set of angles taken this evening were gotten with 273, but the attempt to observe the distances with that power, was altogether ineffectual. The night is very favourable.

Mean Result.

Position 4° 59′ *nf* (15 Obs.); Distance 1″.664 (8 Obs); Epoch 1824.58.

At the Epoch 1783.25 the position of this star was found 14° 0′ *nf*. The change in 41.23 years amounts to 9° 1′, being at the rate of + 0°.219 direct, or in the direction *nf sp*. This change is too great to arise from mere error of observation; so that there is considerable probability of this turning out a binary star, and it ought therefore to be kept in view. (H.)

No. DXXVII. R. A. $6^h\ 27^m$; Decl. 23° 19′ N.

Nova;

Double; 9½ and 10th magnitudes, and bear but a very feeble illumination.

Passy; February 12, 1825; Seven-feet Equatorial.

Position = 68° 2′ *sf*	5 Obs.	Diff. = 2° 52′	Very difficult.
Distance = 15″.951	5 Obs.	Diff. = 0″.769	

Passy; February 19, 1825; Seven-feet Equatorial.

10th and 10½ magnitudes.

Position = 67° 34′ *sf*	5 Obs.	Diff. = 1° 50′	Extremely difficult.
Distance = 15″.859	5 Obs.	Diff. = 0″.769	

Night hazy.

Mean Result.

Position 67° 48″ *sf*; Distance 15″.905; Epoch 1825.12.

No. DXXVIII. R. A. $6^h\ 28^m$; Decl. 31° 44′ N.

Nova;

Double; 8th and 11th magnitudes.

Passy; February 12, 1825; Seven-feet Equatorial.

Position = 63° 40′ *nf* | 5 Obs. | Diff. = 1° 52′
Distance = 1′ 21″.648 | 5 Obs. | Diff. = 0″.649
} Excessively difficult.

The accuracy of the observations is somewhat questionable.

Passy; March 29, 1825; Seven-feet Equatorial.

8th and 11th, or 12th magnitudes.

Position = 64° 29′ *nf* | 5 Obs. | Diff. = 0° 52′
Distance = 1′ 19″.735 ± single observation
} Excessively difficult.

The small star is so extremely obscure, that the distance here given may be liable to an error of five, or even six seconds.

Mean Result.

Position 64° 4′ *nf*; Distance 1′ 20″.691 ±; Epoch 1825.17.

No. DXXIX. R. A. $6^h\ 28^m$; Decl. 12° 23′ N.

Nova;

Triple; A of the 7th, B of the 9th, and C of the 8th magnitudes.

Measures of A B.

Passy; February 12, 1825; Seven-feet Equatorial.

Position = 72° 48′ *sf* | 5 Obs. | Diff. = 0° 57′
Distance = 1′ 32″.329 | 5 Obs. | Diff. = 1″.515
} . . . . . ;

Passy; February 17, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 73° 5′ *sf* | 5 Obs. | Diff. = 0° 53′
Distance = 1′ 31″.661 | 5 Obs. | Diff. = 1″.250
} . . . . . .

Measures of A C.

Passy; February 12, 1825; Seven-feet Equatorial.

7th and 8th magnitudes.

Position = 80° 36′ *sf* | 5 Obs. | Diff. = 0° 51′
Distance = 3′ 8″.079 | 5 Obs. | Diff. = 1″.346
} . . . .

No. D XXIX. continued.

Passy; February 17, 1825; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 80° 55′ *sf*	5 Obs.	Diff. = 0° 51′	. . . . .
Distance = 3′ 7″.747	5 Obs.	Diff. = 1″.058	

Mean Result.

of A B. Position 72° 56′ *sf*; Distance 1′ 31″.995;

of A C. Position 80° 45′ *sf*; Distance 3′ 7″.913;

Epoch 1825.12.

No. DXXX. R. A. 6ʰ 29ᵐ; Decl. 59° 37′ N.

STRUVE, 238;

Double; 9th and 12th magnitudes.

Passy; January 5, 1825; Seven-feet Equatorial.

Position = 47° 6′ *sf*	6 Obs.	Diff. = 3° 49′	Extremely difficult.
Distance = 3″.436	5 Obs.	Diff. = 0″.529	

Passy; February 4, 1825; Seven-feet Equatorial.

9th and 12th magnitudes.

Position = 46° 29′ *sf*	6 Obs.	Diff. = 4° 26′	Excessively difficult.
Distance = 4″.630	5 Obs.	Diff. = 0″.360	

The small star is blue, and will scarcely admit of the least illumination.

Passy; February 9, 1825; Seven-feet Equatorial.

9th and 11th magnitudes.

Position = 46° 51′ *sf*	5 Obs.	Diff. = 1° 38′	Very difficult.
Distance = 4″.123	5 Obs.	Diff. = 0″.336	

Stars extremely well defined, and are unusually steady.

Mean Result.

Position 46° 48′ *sf* (17 Obs.); Distance 4″.063 (15 Obs.);

Epoch 1825.07.

No. DXXXI. R. A. $6^h\ 33^m$; Decl. 55° 54′ N.

STRUVE, 243; II. 72;

Double; 8th and $8\frac{1}{4}$ magnitudes.

Blackman-street; February 2, 1824; Five-feet Equatorial.

Position = 10° 15′ *nf*	5 Obs.	Diff. = 1° 59′	Satisfactory.
Distance = 4″.832	5 Obs.	Diff. = 1″.105	

Stars admirably defined, and as steady as possible. Night still very hazy.

Passy; January 20, 1825; Seven-feet Equatorial.

8th and $8\frac{1}{4}$ magnitudes.

Position = 12° 13′ *nf*	5 Obs.	Diff. = 1° 25′	Night unfavourable.
Distance = 4″.178	5 Obs.	Diff. = 0″.456	

Passy; February 6, 1825; Seven-feet Equatorial.

8th and $8\frac{1}{4}$ magnitudes.

Position = 10° 23′ *nf*	5 Obs.	Diff. = 2° 17′	. . . . .
Distance = 4″.546	5 Obs.	Diff. = 0″.384	

Mean Result.

Position 10° 57′ *nf* (15 Obs.); Distance 4″.519 (15 Obs.); Epoch 1824.74.

There is no change in this star in position, as a measure taken in 1782 makes it 11° 0′ *sp* or *nf*. The distance is only estimated in diameters. (H.)

No. DXXXII. R. A. $6^h\ 33^m$; Decl. 7° 49′ S.

STRUVE, 241; Hist. Cæl. 267.

Double; 10th and 11th magnitudes; pale; ill defined stars, scarcely bearing the least illumination.

Passy; December 29, 1824; Seven-feet Equatorial.

Position = 79° 49′ *sp*	6 Obs.	Diff. = 3° 58′	Excessively difficult.
Distance = 12″.731	5 Obs.	Diff. = 0″.913	

Great confidence must not be placed in the accuracy of these observations: the morning however is extremely favourable.

No. DXXXII. continued.

Passy; January 25, 1825: Seven-feet Equatorial.

10th and 10½ magnitudes.

Position = 79° 48′ *sp*	6 Obs.	Diff. = 2° 48′	Extremely difficult.
Distance = 12″.484	5 Obs.	Diff. = 0″.505	

Night remarkably fine.

Mean Result.

Position 79° 49′ *sp* (12 obs.); Distance 12″.607 (10 obs.); Epoch 1825.03.

No. DXXXIII. R. A. 6^h 33^m; Decl. 25° 18′ N.

ε Geminorum; STRUVE, 242; VI. 73.

Double; 4th and 10th magnitudes; small, blue; and does not bear a good illumination.

Passy; December 29, 1824; Seven-feet Equatorial.

Position = 3° 51′ *sf*	5 Obs.	Diff. = 0° 40′	Very difficult.
Distance = 1′ 51″.788	5 Obs.	Diff. = 1″.923	

Passy; February 6, 1825; Five-feet Equatorial.

4th and 11th magnitudes.

Position = 3° 33′ *sf*	5 Obs.	Diff. = 0° 19′	Very difficult.
Distance = 1′ 51″.366	5 Obs.	Diff. = 0″.841	

Mean Result.

Position 3° 42′ *sf*; Distance 1′ 51″.577; Epoch 1825.04.

Sir W. HERSCHEL has given no measures of position for this star. The distance appears to have undergone no change. (H.)

No. DXXXIV. R. A. 6^h 36^m; Decl. 22° 15′ S.

Nova;

Double; 8th and 11th magnitudes.

Passy; February 17, 1825; Seven-feet Equatorial.

Position = 55° 46′ *sf*	5 Obs.	Diff. = 2° 16′	Excessively difficult.
Distance = 18″.404	5 Obs.	Diff. = 1″.154	

Night hazy, and stars very unsteady.

No. DXXXIV. continued.

Passy; March 28, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 52° 58′ *sf*	5 Obs.	Diff. = 4° 47′	Excessively difficult.
Distance = 18″.109	5 Obs.	Diff. = 0″.721	

Observed when 1¼ hour west of the meridian.

Passy: March 29, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 53° 30′ *sf*	5 Obs.	Diff. = 2° 20′	Extremely difficult.
Position = 53° 10′ *sf*	5 Obs.	Diff. = 2″.36	

The first set was observed by twilight, without artificial illumination; the stars being 40 minutes west of the meridian; the last by the aid of the lamp, when 70 minutes west of it.

Mean Result.

(The angles taken on February 17 being rejected)

Position 53° 13′ *sf*; (15 Obs.); Epoch 1825.23;

Distance 18″.252; Epoch 1825.17.

No. DXXXV. R. A. 6h 40m; Decl. 75° 30′ N.

STRUVE, 247; Hist. Cæl. 365;

Double; 8th and 10th magnitudes.

Passy; January 5, 1825; Seven-feet Equatorial.

Position = 66° 14′ *nf*	5 Obs.	Diff. = 1° 13′	Very difficult.
Distance = 12″.635	5 Obs.	Diff. = 0″.481	

Passy; February 4, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 65° 21′ *nf*	5 Obs.	Diff. = 1° 23′	Difficult.
Distance = 12″.441	5 Obs.	Diff. = 0″.697	

Mean Result.

Position 65° 47′ *nf*; Distance 12″.538; Epoch 1825.05.

No. DXXXVI. R. A. $6^h\ 41^m$; Decl. 39° 5′ N.

59 Aurigæ; STRUVE, 248; IV. 102.

Double; 6th and 15th magnitudes.

Passy; January 8, 1825; Seven-feet Equatorial.

Position = 48° 19′ *s p* | 5 Obs. | Diff. = 1° 30′ } Excessively difficult.
Distance = 21″.601 | 5 Obs. | Diff. = 1″.082 }

The small star is a mere point, and will not bear any illumination; the night is now tolerably good.

In 1783, the measures were 50° 8′ *n p*, and 23″.50; so that this star has undergone no material change. (H.)

No. DXXXVII. R. A. $6^h\ 42^m$; Decl. 23° 55′ S.

Nova;

Double; 7th and 11th magnitudes; small, blue.

Passy; February 23, 1825; Seven-feet Equatorial.

Position = 11° 54′ *n p* | 5 Obs. | Diff. = 1° 7′ } Very difficult.
Distance = 30″.908 | 5 Obs. | Diff. = 1″.058 }

Passy; March 2, 1825; Seven-feet Equatorial.

7th and 11th magnitudes.

Position = 11° 49′ *n p* | 5 Obs. | Diff. = 1° 15′ } Extremely difficult.
Distance = 29″.873 | 5 Obs. | Diff. = 0″.865 }

Passy; March 18, 1825; Seven-feet Equatorial.

7th and 11th magnitudes.

Distance = 30″.134 | 5 Obs. | Diff. = 1″.370. Excessively difficult.

The small star becomes invisible under the slightest illumination.

Mean Result.

Position 11° 51′ *n p* (10 Obs.); Epoch 1825.15;
Distance 30″.305 (15 Obs.); Epoch 1825.17.

No. DXXXVIII. R. A. $6^h\ 42^m$; Decl. 23° 55′ S.

Nova;

Double; 8th and 9th magnitudes; small, blue.

Passy; February 18, 1825; Seven-feet Equatorial.

Position = 86° 50′ *nf* | 5 Obs. | Diff. = 0° 43′. Difficult.

The night is become cloudy; observations of distance are impracticable.

Passy; February 23, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 86° 38′ *nf* | 5 Obs. | Diff. = 1° 11′
Distance = 27″.879 | 5 Obs. | Diff. = 1″.178 } Very difficult.

Passy; March 2, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Distance = 27″.733 | 5 Obs. | Diff. = 0″.841. Very difficult.

Mean Result.

Position 86° 44′ *nf*; Epoch 1825.13; Distance 27″.806; Epoch 1825.15.

No. DXXXIX. R. A. $6^h\ 43^m$; Decl. 46° 47′ N.

Struve, 250;

Double; 9th and 12th magnitudes.

Passy; January 8, 1825; Seven-feet Equatorial.

Position = 60° 53′ *sp* | 5 Obs. | Diff. = 1° 34′
Distance = 8″.329 | 5 Obs. | Diff. = 0″.817 } Extremely difficult.

The small star is very faint, and bears but the most feeble illumination.

Passy; February 5, 1825; Seven-feet Equatorial.

9th and 12th magnitudes.

Position = 60° 19′ *sp* | 5 Obs. | Diff. = 2° 15′
Distance = 8″.129 | 5 Obs. | Diff. = 0″.697 } Extremely difficult.

Mean Result.

Position 60° 36′ *sp*; Distance 8″.229; Epoch 1825.08.

No. DXL. R. A. $6^h\ 47^m$; Decl. 20° 11′ S.

π^2 Canis Major; STRUVE, 252; V. 65.

Quadruple; A of the 6th, B of the 10th, C of the 12th, and D of the 15th magnitudes.

Measures of A B.

Passy; January 8, 1825; Seven-feet Equatorial.

Position = 58° 11′ *sf* | 5 Obs. | Diff. = 1° 35′ } Extessively difficult.
Distance = 45″.876 ± | 1 Obs. | } Extessively difficult.

The night is become so unfavourable, that no more observations can be gotten.

Passy; January 17, 1825; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = 57° 43′ *sf* | 5 Obs. | Diff. = 1° 1′ } Extremely difficult.
Distance = 44″.775 | 5 Obs. | Diff. = 0″.913 } Extremely difficult.

Passy; February 9, 1825; Seven-feet Equatorial.

6th and 10th magnitudes.

Distance = 45″.123 | 5 Obs. | Diff. = 2″.019. Extremely difficult.

Measures of A C.

Passy; January 17, 1825; Seven-feet Equatorial.

6th and 12th magnitudes.

Position = 86° 19′ *sp* | 5 Obs. | Diff. = 3° 28′ } Excessively difficult.
Distance = 52″.188 | 2 Obs. | Diff. = 0″.360 } Excessively difficult.

The observations of distance very precarious, and of the pair A D no measures can be obtained. Night remarkably fine; but the dew on the object-glass is excessively troublesome.

Passy; February 9, 1825; Seven-feet Equatorial.

6th and 12th magnitudes.

Position = 85° 5′ *sp* | 5 Obs. | Diff. = 1° 23′ } Excessively difficult.
Distance = 53″.265 | 5 Obs. | Diff. = 1″.226 } Excessively difficult.

Measures of A D.

Passy; February 9, 1825; Seven-feet Equatorial.

6th and 15th magnitudes.

Position = 84° 44′ *sp* | 2 Obs. | Diff. = 0° 13′ } Excessively difficult.
Distance = 2′ 8″.360 ± | 2 Obs. | Diff. = 1″.443 } Excessively difficult.

Observations probably a little inaccurate; the small star can only be seen by glimpses.

No. DXL. continued.

Mean Result.

of A B. Position 57° 57′ *sf* (10 Obs.); Epoch 1825.03; Distance 45″.033 (11 Obs.); Epoch 1825.05.

of A C. Position 85° 42′ *sp* (10 Obs.); Distance 52″.957 (7 Obs.); Epoch 1825.07.

of A D. Position 84° 44′ *sp* (2 Obs.); Distance 2′ 8″.360 ± (2 Obs.); Epoch 1825.10.

A considerable change seems to have taken place in the position of these stars since 1783, in which year the measures were: Position 64° 12′ *sf*; Distance 44″.93. The difference, 6° 15′, is much more than could be fairly attributable to error of observation in a star of the 5th class, except under very difficult circumstances. (H.)

No. DXLI. R. A. 6^h 50^m; Decl. 22° 24′ S.

Nova;

Triple; A of the 8th, B of the 9th, and C of the 10th magnitudes.

Measures of A B.

Passy; February 21, 1825; Seven-feet Equatorial.

Position = 46° 6′ *nf*	5 Obs.	Diff. = 1° 40′	}	Difficult.
Distance = 23″.917	5 Obs.	Diff. = 1″.154	}	

Passy; March 17, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 47° 39′ *nf*	5 Obs.	Diff. = 2° 52′	}	Extremely difficult.
Distance = 24″.277	5 Obs.	Diff. = 1″.322	}	

The small star bears scarcely any illumination.

No. DXLI. continued.

Passy; Measure of A C. February 21, 1825.

Position = 32° 10′ ± *sf*; single observation.

Night so unfavourable, measures entitled to confidence cannot be procured.

Mean Result.

of A B. Position 46° 52′ *nf*; Distance 24″.097; Epoch 1825.16.

of A C. Position 32° 10′ *sf* ±; single observation.

No. DXLII. R. A. $6^h\ 51^m$; Decl. 53° 1′ N.

STRUVE, 253; I. 69.

Double; $8\frac{1}{2}$ and $8\frac{1}{4}$ magnitudes.

Blackman-street; February 2, 1824; Five-feet Equatorial.

Position = 66° 35′ *sf*	5 Obs.	Diff. = 1° 0′	}	Very good.
Distance = 3″.998	5 Obs.	Diff. = 0″.411	}	

Stars beautifully defined, and very steady; but the night is hazy.

Passy; February 11, 1825; Seven-feet Equatorial.

8th and $8\frac{1}{2}$ magnitudes.

Position = 67° 14′ *sf*	5 Obs.	Diff. = 1° 44′	}	. . . .
Distance = 3″.785	5 Obs.	Diff. = 1″.034	}	

Mean Result.

Position 66° 54′ *sf*; Distance 3″.891; Epoch 1824.59.

This star has undergone a change of position so considerable, as to entitle it provisionally to a place among the binary or connected stars. At the Epoch 1782.87, an observation of Sir W. HERSCHEL, noted as "very exact," makes the position 77° 24′ *sf*. The change is — 10° 30′ in 41ʸ.72, giving an annual motion of — 0°.252, in the direction *n p sf*, or retrograde. This star therefore merits the assiduous attention of astronomers. (H.)

No. DXLIII. R. A. $6^h\ 54^m$; Decl. 22° 25′ S.

Nova;

Double; 9th and $9\frac{1}{2}$ magnitudes.

Passy: February 21, 1825; Seven-feet Equatorial.

Position = 1° 34′ *np*	5 Obs.	Diff. = 0° 50′	Very difficult.
Distance = 1′ 30″.836	5 Obs.	Diff. = 0″.649	

Stars very unsteady.

Passy; March 10, 1825; Seven-feet Equatorial.

10th and $10\frac{1}{2}$ magnitudes.

Position = 1°.17′ *np*	5 Obs.	Diff. = 0° 50′	Extremely difficult.
Distance = 1′ 32″.130	5 Obs.	Diff. = 1″.202	

Passy; March 28, 1825; Seven-feet Equatorial.

$9\frac{1}{2}$ and 10th magnitudes.

Distance = 1′ 31″.329 | 5 Obs. | Diff. = 2″.164. Extremely difficult.

Mean Result.

Position 1° 25′ *np* (10 Obs.); Epoch 1825.16;

Distance 1′ 31″.432 (15 Obs.); Epoch 1825.16.

No. DXLIV. R. A. $7^h\ 2^m$; Decl. 22° 35′ N.

Nova;

Double; equal; each of the 9th magnitude, and bear a very good illumination.

Passy; February 12, 1825; Seven-feet Equatorial.

Position = 50° 54′ *sp* or *nf*	5 Obs.	Diff. = 2° 28′	. . . .
Distance = 9″.223	5 Obs.	Diff. = 0″.456	

Passy; February 17, 1825; Seven-feet Equatorial.

Equal; each of the 9th magnitude.

Position = 48° 48′ *nf* or *sp*	5 Obs.	Diff. = 1° 8′	Very unsteady.
Distance = 9″.632	5 Obs.	Diff. = 0″.384	

Passy; February 24, 1825; Portable Transit.

Observed R. A. of the northern or following star = $7^h\ 1′\ 33″.79$.

Mean Result.

Position 49° 51′ *sp* or *nf*; Distance 9″.427; Epoch 1825.12.

No. DXLV. R. A. $7^h\ 5^m$; Decl. 73° 23′ N.

STRUVE, 256; 1790, 387;

Double; $8\frac{1}{2}$ and 9th magnitudes.

Passy; January 5, 1825; Seven-feet Equatorial.

Position = 8° 13′ *nf* | 5 Obs. | Diff. = 0° 58′. . . . . .

Passy; February 4, 1825; Seven-feet Equatorial.

Position = 8° 52′ *nf* | 5 Obs. | Diff. = 0° 53′ }
Distance = 31″.291 | 5 Obs. | Diff. = 0″.481 } . . . . .

Passy; February 6, 1825; Seven-feet Equatorial.

$8\frac{1}{2}$ and 9th magnitudes.

Distance = 30″.879 | 5 Obs. | Diff. = 0″.889.

Mean Result.

Position 8° 32′ *nf*; Epoch 1825.05; Distance 31″.085;
Epoch 1825.09

No. DXLVI. R. A. $7^h\ 10^m$; Decl. 31° 48′ N.

Nova;

Triple; A $8\frac{1}{2}$, B 10th, and C of the 11th magnitudes.

Measures of A B.

Passy; February 12, 1825; Seven-feet Equatorial.

Position = 89° 29′ *np* | 5 Obs. | Diff. = 0° 37′ }
Distance = 1′ 19″.350 | 5 Obs. | Diff. = 0″.601 } Very difficult.

Passy; February 17, 1825; Seven-feet Equatorial.

$8\frac{1}{2}$ and 10th magnitudes.

Position = 89° 15′ *np* | 5 Obs. | Diff. = 0° 32′ }
Distance = 1′ 19″.850 | 5 Obs. | Diff. = 1″.202 } Extremely difficult.

Measures of A C.

Passy; February 12, 1825; Seven-feet Equatorial.

$8\frac{1}{2}$ and 11th magnitudes.

Position = 20° 51′ *nf* | 2 Obs. | Diff. = 0° 38′ }
Distance = 2′ 22″.637 | 2 Obs. | Diff. = 0″.793 } Excessively difficult.

Measures to be regarded with some distrust.

No. DXLVI. continued.

Passy; February 17, 1825; Seven-feet Equatorial.

9th and 12th magnitudes.

Position = 20° 40′ *nf*; single observation.

The night is become so hazy that no more measures can be obtained.

Mean Result.

of A B. Position 89° 22′ *np*; Distance 1′ 19″.600;
Epoch 1825.12.

of A C. Position 20° 47′ *nf* (3 Obs.); Epoch 1825.12;
Distance 2′ 22″.637 (2 Obs.); Epoch 1825.11.

No. DXLVII. R. A. $7^h\ 15^m$; Decl. 20° 48′ N.

STRUVE, 260; III. 48;

Double; 8th and $9\frac{1}{2}$ magnitudes.

Blackman-street; March 12, 1824; Five-feet Equatorial.

Position = 50° 51′ *nf*	5 Obs.	Diff. = 2° 11′
Distance = 6″.511	5 Obs.	Diff. = 0″.505

Blackman-street; March 31, 1824: Five-feet Equatorial.

8th and 10th magnitudes.

Position = 50° 37′ *nf*	5 Obs.	Diff. = 3° 43′	Measures very difficult.
Distance = 6″.521	5 Obs.	Diff. = 0″.569	

Mean Result.

Position 50° 44′ *nf*; Distance 6″.516; Epoch 1824.21.

There is a notable alteration perceivable in the position of this star. A measure on the 1st of January, 1783, marked "very exact," makes the angle 43° 54′ *nf*, and the distance at the same time was found to be 6″.25. The change of position amounts to −6° 50′, being −0°.166 per annum, retrograde. Future observations must decide on the reality of this motion, and whether this is entitled to more than a provisional place among the Binary stars. (H.)

No. DXLVIII. R. A. $7^h\ 17^m$; Decl. 22° 30′ N.

STRUVE, 261; V. 66;

Double; 7th and 10th magnitudes.

Passy; January 29, 1825; Seven-feet Equatorial.

Position = 6° 3′ *np*	5 Obs.	Diff. = 0° 53′	Very steady.
Distance = 36″.008	5 Obs.	Diff. = 1″.539	

Night remarkably fine.

Passy; February 5, 1825; Seven-feet Equatorial.

7th and 10th magnitudes.

Position = 5° 42′ *np*	5 Obs.	Diff. = 0° 42′	. . . . .
Distance = 35″.231	5 Obs.	Diff. = 1″.034	

Mean Result.

Position 5° 52′ *np*; Distance 35″.619; Epoch 1825.09.

An estimation in 1783 made the angle 1° or 2° *np*, and a measure of distance at the same time gave 34″.65. It is to be presumed therefore that this star is liable to no notable alteration in either respect. (H.)

No. DXLIX. R. A. $7^h\ 20^m$; Decl. 14° 15′ N.

STRUVE, 264; Hist. Cæl. 314;

Triple; A 6th, B 10th, and C of the 7th magnitudes.

Measures of A B.

Passy; January 6, 1825; Seven-feet Equatorial.

Position = 39° 4′ *nf*	7 Obs.	Diff. = 5° 58′	Extremely difficult.
Distance = 7″.985	5 Obs.	Diff. = 0″.649	

Passy; January 19, 1825; Seven-feet Equatorial.

6th and 11th or 12th magnitudes.

Position = 40° 33′ *nf*	5 Obs.	Diff. = 5° 43′	Excessively difficult.
Distance = 8″.014	5 Obs.	Diff. = 0″.721	

No. DXLIX. continued.

Measures of A C.

Passy; January 6, 1825; Seven-feet Equatorial.

6th and 7th magnitudes.

Position = 39° 36′ *sf* | 5 Obs. | Diff. = 0° 33′
Distance = 1′ 50″.988 | 6 Obs. | Diff. = 1″.010 . . . . . .

Passy; January 17, 1825; Seven-feet Eqnatorial.

6th and 7th magnitudes.

Position = 39° 35′ *sf* | 5 Obs. | Diff. = 0° 49′
Distance = 1′ 52″.107 | 6 Obs. | Diff. = 1″.202 . . . . . .

Of A B no measures can be obtained, although the night is beautifully fine; the object-glass cannot be kept one minute free from moisture.

Passy; March 26, 1825; Seven-feet Equatorial.

6th and 7th magnitudes.

Distance = 1′ 51″.699 | 5 Obs. | Diff. = 1″.106.

Mean Result.

of A B. Position 39° 41′ *nf* (12 Obs.); Distance 7″.999; Epoch 1825.03.

of A C. Position 39° 35′ *sf* (10 Obs.); Epoch 1825.03; Distance 1′ 51″.627 (17 Obs.); Epoch 1825.09.

No. DL. R. A. 7^h 20^m; Decl. 18° 8′ S.

STRUVE, 263; Hist. Cæl. 281;

Double; 7½ and 8th magnitudes: small, blue.

Passy; January 2, 1825; Seven-feet Equatorial.

Position 26° 22′ *sf* | 5 Obs. | Diff. = 1° 12. . . . . .

Passy; January 17, 1825; Seven-feet Equatorial.

7½ and 8th magnitudes.

Position = 26° 1′ *sf* | 5 Obs. | Diff. = 0° 52′
Distance = 40″.192 | 5 Obs. | Diff. = 0″.937 . . . . . .

Passy; January 28, 1825; Seven-feet Equatorial.

7½ and 8th magnitudes.

Distance = 39″.899 | 5 Obs. | Diff. = 1″.250. Very unsteady.

Mean Result.

Position 26° 12′ *sf*; Epoch 1825.02; Distance 40″.041; Epoch 1825.05.

No. DLI. R. A. $7^h\ 21^m$; Decl. 5° 37′ N.

STRUVE, 265; Hist. Cæl. 261;

Double; 9th and 12th magnitudes; small, blue, and bears but a very slight illumination.

Passy; January 2, 1825; Seven-feet Equatorial.

Position = 24° 58′ *s p*	6 Obs.	Diff. = 1° 55′	Extremely difficult.
Distance = 4″.686	5 Obs.	Diff. = 0″.456	

Passy; January 19, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 24° 32′ *s p*	5 Obs.	Diff. = 2° 48′	Very difficult.
Distance = 4″.513	5 Obs.	Diff. = 1″.491	

Mean Result.

Position 24° 46′ *s p* (11 Obs.); Distance 4″.599 (10 Obs.); Epoch 1825.03.

No. DLII. R. A. $7^h\ 27'$; Decl. 23° 4′ S

145, 19; or Nova?

Double; 7th and 7¼ magnitudes.

Passy; December 29, 1824; Seven-feet Equatorial.

Position = 14° 53′ *n p*	5 Obs.	Diff. = 0° 46′	. . . . .
Distance = 8″.860	5 Obs.	Diff. = 0″.408	

Passy; December 31, 1824; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 14° 54′ *n p*	5 Obs.	Diff. = 0° 57′	Very unsteady.
Distance = 9″.683	5 Obs.	Diff. = 0″.625	

Passy; January 28, 1825; Seven-feet Equatorial.

7th and 7¼ magnitudes.

Distance = 8″.477 | 5 Obs. | Diff. = 1″.394. Rather difficult.

Stars neither well defined or steady. The dew on the object glass is intolerably troublesome. The water precipitated on the instrument is trickling from it, falls upon my face during the observations of high stars, and is extremely annoying. Thermometer stands at 28°.

Mean Result.

Position 14° 58′ *n p* (10 Obs.); Epoch 1825.00;
Distance 9″.007 (15 Obs.); Epoch 1825.02.

No. DLIII. R. A. $7^h\ 28^m$; Decl. 14° 6′ S.

34 (Bode) Off. Typograph.; Struve, 268; II. 63;

Double; 8th and 8½ magnitudes. Placed in a telescopic constellation, I count more than 70 stars in the field.

Passy; December 29, 1824; Seven-feet Equatorial.

Position = 32° 48′ *n p*	5 Obs.	Diff. = 0° 23′	. . . . .
Distance = 7″.383	5 Obs.	Diff. = 0″.529	

A minute or two to the north of this star, and following it a few seconds of time, will be found a double star of the 5th or 6th class; and about the same declination as this last-named star, by sweeping a few minutes in right ascension, a double star of the 4th class (8th or 10th magnitudes) will be seen in the field.

Passy; January 17, 1825; Seven-feet Equatorial.

8th and 8¼ magnitudes.

Position = 33° 52′ *n p*	5 Obs.	Diff. = 1° 55′	. . . . .
Distance = 7″.492	5 Obs.	Diff. = 0″.601	

Mean Result.

Position 33° 20′ *n p*; Distance 7″.487; Epoch 1825.02.

This star has undergone no material change in position or distance since Sir W. Herschel's observations in 1783, which made it 30° 12′ *n p*, and 6 or 7″ by estimation of diameters. (H.)

No. DLIV. R. A. $7^h\ 28^m$; Decl. 14° 7′ S.

Nova;

Double; 8th and 15th magnitudes. The large star precedes the second star of 34 (Bode) Off. Typogr. 32 seconds of time, and is about 39 seconds to the south of that star.

Passy; March 12, 1825; Seven-feet Equatorial.

Position = 54° 37′ *s f*	5 Obs.	Diff. = 1° 19′	Excessively difficult.
Distance = 20″.355	5 Obs.	Diff. = 1″.154	

The small star will neither bear illumination nor magnifying power. Observations were made with 105: with 179 I could not obtain any measures.

No. DLIV. continued.

Passy; March 17, 1825; Seven-feet Equatorial.

8th and 15th magnitudes.

Position = 54° 56′ *nf* | 3 Obs. | Diff. = 3° 47′. Excessively difficult.

Measures of distance cannot be procured; the small star will not bear the slightest illumination. Observed with 105; with 179 the small star was invisible. The accuracy of the results is I fear somewhat questionable.

Passy; March 23, 1825; Seven-feet Equatorial.

8th and 15th magnitudes.

Position = 54° 37′ *nf* | 5 Obs. | Diff. = 0° 42′
Distance = 20″.197 | 5 Obs. | Diff. = 1″.394 } Excessively difficult.

Observed with the ordinary power of 179, on the meridian. Night cloudy. Stars of considerable southern declination are alone visible, but they are unusually bright, and tolerably steady.

Mean Result.

Position 54° 41′ *nf* (13 Obs.); Distance 20″.276 (10 Obs.);
Epoch; 1825.20.

No. DLV. R. A. 7ʰ 28ᵐ; Decl. 14° 4′ S.

Nova; *nf* 34 BODE Off. Typograph.

Double; 7½ and 8th magnitudes.

Passy: December 29, 1825; Seven-feet Equatorial.

Position = 41° 52′ *sp* | 6 Obs. | Diff. = 1° 10
Distance = 1′ 34″.529 | 5 Obs. | Diff. = 1″.058 } . . . . . .

It is the double star first alluded to in the observations of 34 BODE Off. Typog.; and its smaller star has nearly the same R. A. as the larger star of 34 Off. Typog.

Passy; December 31, 1825; Seven-feet Equatorial.

8½ and 9th magnitudes.

Position = 42° 22′ *sp* | 6 Obs. | Diff. = 0° 36′
Distance = 1′.34″.933 | 5 Obs. | Diff. = 0″.625 } Rather difficult.

Night very unfavourable.

Mean Result.

Position 42° 17′ *sp* (12 Obs.); Distance 1′ 34″.731 (10 Obs.);
Epoch 1825.00.

No. DLVI. R. A. $7^h\ 28^m$; Decl. 65° 34′ N.

STRUVE, 267; P. VII. 159.

Double; 9th and $9\frac{1}{2}$ magnitudes.

Passy; January 5, 1825; Seven-feet Equatorial.

Position = 85° 58′ *nf*	5 Obs.	Diff. = 1° 20′
Distance = 16″.285	5 Obs.	Diff. = 0″.481

Passy; February 4, 1825; Seven-feet Equatorial.

9th and $9\frac{1}{2}$ magnitudes.

Position = 85° 28′ *sp*	5 Obs.	Diff. = 1° 27′
Distance = 16″.066	5 Obs.	Diff. = 0″.408

Stars very steady. Thermometer stands at 27°.5. Wind very high.

Mean Result.

Position 85° 43′ *nf*; Distance 16″.175; Epoch 1825.05.

No. DLVII. R. A. $7^h\ 29^m$; Decl. 14° 3′ S.

Nova;

Double; 8th and 10th magnitudes; small, blue.

Passy; March 10, 1825; Seven-feet Equatorial.

Position = 66° 38′ *np*	5 Obs.	Diff. = 1° 25′
Distance = 1′ 6″.225	5 Obs.	Diff. = 0″.865

The larger star of this double star follows the first of 34 (BODE) Off. Typogr. 1′ 2″.3 of time, and is to the north of that star about 2′ 47″.

Passy; March 12, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 67° 5′ *np*	5 Obs.	Diff. = 0° 41′
Distance = 1′ 6″.488	5 Obs.	Diff. = 0″.793

Mean Result.

Position 66° 51′ *np*; Distance 1′ 6″.856; Epoch 1825.19.

No. DLVIII. R. A. $7^h\ 33^m$; Decl. 8° 6′ S.

STRUVE, 271; Hist. Cæl. 275.

Double; 9th and 10th magnitudes.

Passy; January 2, 1825: Seven-feet Equatorial.

Position = 31° 36′ *s p*	5 Obs.	Diff. = 1° 22′	Difficult.
Distance = 20″.223	5 Obs.	Diff. = 1″.010	

Passy; January 19, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 32° 13′ *s p*	5 Obs.	Diff. = 1° 43′	Very difficult.
Distance = 19″.261	5 Obs.	Diff. = 0″.697	

Passy; January 28, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Distance = 20″.173 | 5 Obs. | Diff. = 0″.962. Very difficult.

The stars are not steady; and the deposition of moisture on both surfaces of the object-glass is so copious and rapid, that although well wiped off, before the instrument can be replaced upon the star it re-collects, and compels me to discontinue the observations; a circumstance much to be regretted, for the night is beautifully clear. Thermometer in the Observatory stands at 28°.

Mean Result.

Position 31° 54′ *s p* (10 Obs.); Epoch 1825.03;
Distance 19″.886 (15 Obs.); Epoch 1825.04.

No. DLIX. R. A. $7^h\ 34^m$; Decl. 28° 28′ N.

Pollux; STRUVE, 274; VI. 42;

Triple; A 2nd, B 15th, and C of the 20th magnitudes.

Measures of A B.

Passy; February 5, 1825; Seven-feet Equatorial.

Position = 17° 13′ ± *s f*	5 Obs.	Diff. = 0° 21′	Excessively difficult.
Distance = 3′ 19″.469 ±	5 Obs.	Diff. = 2″.885	

Observations liable to some slight error.

No. DLIX. continued.

Passy; February 9, 1825; Seven-feet Equatorial.

2nd and 15th magnitudes.

Position = 17° 27′ *nf* ± | 5 Obs. | Diff. = 1° 11′ } Excessively difficult.
Distance = 3′ 15″.961 ± | 2 Obs. | Diff. = 0″.553 }

Results probably a little inaccurate.

Measures of A C.

Passy; February 5, 1825; Seven-feet Equatorial.

2nd and 20th magnitudes.

Position = 24° 6′ *nf* | 2 Obs. | Diff. = 0° 43′. Excessively difficult.

The star C will not bear even the least illumination. No observations of distance can be gotten; but by estimation, it is about two-thirds of the distance from A, that B is. The night is remarkably fine; indeed on no other can either of the stars B or C be seen with this instrument.

Passy; February 9, 1825; Seven-feet Equatorial.

2nd and 20th magnitudes.

Position = 23° 25′ *nf* | 5 Obs. | Diff. 3° 57′. Excessively difficult.

Of C no distances can be procured. The night is unusually fine, but the star will not bear the slightest illumination.

Mean Result.

of A B. Position 17° 20′ *nf* (10 Obs.); Distance 3′ 18″.467 (7 Obs.); Epoch 1825.10.

of A C. Position 23° 37′ *nf* (7 Obs.); Distance (estimated) 2′ 12″.312 ±; Epoch 1825.10.

The position of the nearer star in 1783 was 24° 28 *nf*, differing only 51′ from the present measure. (H.)

No. DLX. R. A. $7^h\ 37^m$; Decl. 29° 13′ N.

STRUVE, 279; V. 67.

Double; 6th and 12th magnitudes.

Passy; January 6, 1825; Seven-feet Equatorial.

Position = 89° 22′ *np* | 5 Obs. | Diff. = 1° 3′
Distance = 1′ 29″.821 | 5 Obs. | Diff. = 1″.202 } Extremely difficult.

Passy; January 25, 1825; Seven-feet Equatorial.

6th and 12th magnitudes.

Position = 89° 21′ *np* | 5 Obs. | Diff. = 1° 36′
Distance = 1′ 31″.290 | 5 Obs. | Diff. = 2″.284 } Extremely difficult.

Passy; March 26, 1825; Seven-feet Equatorial.

6th and 12th magnitudes.

Distance = 1′ 30″.684 | 5 Obs. | Diff. = 0″.913. Extremely difficult.

Mean Result.

Position 89° 22′ *np* (10 Obs.); Epoch 1825.04;
Distance 1′ 30″.598 (15 Obs.); Epoch 1825.10.

There is a doubt as to the identity of the star here measured with V. 67. (H.)

No. DLXI. R. A. $7^h\ 41^m$; Decl. 25° 16′ S.

Nova;

Double; 10th and 11th magnitudes.

Passy; February 19, 1825; Seven-feet Equatorial.

Position = 87° 45′ *nf* | 5 Obs. | Diff. = 1° 48′
Distance = 51″.744 | 5 Obs. | Diff. = 1″.322 } Excessively difficult.

Neither star bears sufficient illumination.

Passy; February 21, 1825; Seven-feet Equatorial.

10th and 11th magnitudes.

Position = 88° 15′ *nf* | 5 Obs. | Diff. = 0° 27′
Distance = 49″.990 | 5 Obs. | Diff. = 0″.962 } Excessively difficult.

The star B is double of the 2nd class: its small star is about 35° *sp*, and distance perhaps 5 seconds; it will not bear the slightest illumination. The measures of A B, particularly those of distance, are precarious.

No. DLXI. continued.

Passy; March 26, 1825; Seven-feet Equatorial.

10th and 11th magnitudes.

Distance = 50″.960 | 5 Obs. | Diff. = 1″.154. Excessively difficult.

Mean Result.

Position 88° 0′ *nf* (10 Obs.); Epoch 1825.13;
Distance 50″.898 (15 Obs.); Epoch 1825.17.

No. DLXII. R. A. $7^h\ 49^m$; Decl. 79° 59′ N.

Nova;

Double; 9th and 9½ magnitudes.

Passy; February 11, 1825; Seven-feet Equatorial.

Position = 80° 12′ *nf*	5 Obs.	Diff. = 0° 27′	Very good.
Distance = 21″.409	5 Obs.	Diff. = 0″.432	

These stars bear a very good illumination: their circumpolar situation allowing them to be well observed throughout the year, and their position, (so near the perpendicular,) rendering them susceptible of the most accurate measures, they would be admirably adapted for parallax observations.

Passy; February 17, 1825; Seven-feet Equatorial.

9½ and 10th magnitudes.

Position = 79° 58′ *nf*	5 Obs.	Diff. = 1° 43′	Very satisfactory.
Distance = 21″.471	5 Obs.	Diff. = 0″.456	

Mean Result.

Position 80° 5′ *nf*; Distance 21″.440; Epoch 1825.12.

No. DLXIII. R. A. $8^h\ 0^m$; Decl. 19° 18′ S.

Nova;

Double; 6th and 7th magnitudes.

Passy; March 21, 1825; Seven-feet Equatorial.

Position = 34° 17′ *nf*	5 Obs.	Diff. = 0° 41′	Very steady.
Distance = 2′ 13″.426	5 Obs.	Diff. = 1″.010	

Passy; March 28, 1825; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 34° 22′ *nf*	5 Obs.	Diff. = 0° 37′	Tolerably steady.
Distance = 2′ 13″.979	5 Obs.	Diff. = 2″.043	

Mean Result.

Position 34° 20′ *sp*; Distance 2′ 13″.702; Epoch 1825.22.

No. DLXIV. R. A. $8^h\ 2^m$; Decl. 1° 48′ N.

STRUVE, 290; Hist. Cæl. 263.

Double; equal; each of the 10th magnitude.

Passy; January 2, 1825; Seven-feet Equatorial.

Position = 68° 37′ *np* or *sf*	5 Obs.	Diff. = 0° 30′	Very difficult.
Distance = 33″.639	5 Obs.	Diff. = 0″.889	

Neither star bears a good illumination.

Passy; January 25, 1825; Seven-feet Equatorial.

10th and 10½ magnitudes.

Position = 68° 29′ *np*	5 Obs.	Diff. = 1° 18′	Very difficult.
Distance = 33″.603	5 Obs.	Diff. = 0″.962	

Mean Result.

Position 68° 33′ *np* or *sf*; Distance 33″.621; Epoch 1825.03.

No. DLXV. R. A. $8^h\ 12^m$; Decl. 42° 34′ N.

STRUVE, 294; Hist. Cæl. 54;

Double; 7th and 10th magnitudes.

Blackman-street; March 13, 1824; Five-feet Equatorial.

Position = 74° 5′ *sf*	5 Obs.	Diff. = 0° 52′	Very difficult.
Distance = 1′ 12″.361	5 Obs.	Diff. = 0″.885	

Passy; January 25, 1825; Seven-feet Equatorial.

7th and 9½ magnitudes.

Position = 75° 31′ *sf*	5 Obs.	Diff. = 0° 29′	Very difficult.
Distance = 1′ 13″.801	5 Obs.	Diff. = 0″.841	

Passy; February 3, 1825; Seven-feet Equatorial.

7th and 10th magnitudes.

Distance = 1′ 12″.959 | 5 Obs. | Diff. = 0″.721. Very difficult.

Mean Result.

Position 74° 48′ *sf* (10 Obs.); Epoch 1824.59;

Distance 1′ 13″.040 (15 Obs.); Epoch 1824.75.

No. DLXVI. R. A. $8^h\ 15^m$; Decl. 28° 26′ N.

ϕ' Cancri; STRUVE, 296; VI. 109.

Double; 7th and 12th, or 15th magnitudes.

Passy; January 29, 1825; Seven-feet Equatorial.

Position = 68° *a nf* ±; single Observation.

The night, which had been remarkably fine, cloudless, and unusually favourable for delicate observations, on account of the extreme steadiness of the stars, which enabled me to keep them bisected by the wires as long as I pleased, suddenly became bad; a dense fog in less than five minutes after the instrument was placed upon this star, rendered all the stars, Jupiter and Saturn, invisible; the Moon's place also was scarcely to be distinguished. It has frozen all day: the thermometer in the shade stood between 29° and 31°: it now indicates 28°. The instrument is covered with hoar frost, and the fog is so severe that I cannot see across the garden, a distance from the observatory not more than 100 feet.

Passy; February 5, 1825; Seven-feet Equatorial.

7th and 15th magnitudes.

Position = 67° 59′ *nf* | 3 Obs. | Diff. = 0° 59′. Excessively difficult.

Observations of distance impracticable; the small star will not bear the slightest illumination.

Passy; February 9, 1825; Seven-feet Equatorial.

7th and 15th magnitudes.

Position = 68° 22′ *nf* | 5 Obs. | Diff. = 1° 36′
Distance = 2′ 1″.209 | 5 Obs. | Diff. = 1″.683 } Excessively difficult.

Passy; March 21, 1825; Seven-feet Equatorial.

7th and 15th magnitudes.

Distance = 2′ 0″.091 ±; single Observation. Excessively difficult.

The small star is so excessively faint, that it will not bear even the slightest illumination; and the measure here given was the result of half an hour's attention.

Passy; March 26, 1825; Seven-feet Equatorial.

7th and 15th magnitudes.

Distance = 2′ 0″.851 | 5 Obs. | Diff. = 2″.115. Excessively difficult.

Mean Result.

Position 68° 12′ *nf* (9 Obs.): Epoch 1825.09;
Distance 2′ 0″.945 (11 Obs.); Epoch 1825.18.

Sir W. HERSCHEL has given no measures of this star. (H.)

No. DLXVII. R. A. $8^h\ 15^m$; Decl. 20° 43′ N.

Nova;

Double; 7th and 9th magnitudes; small, blue.

Passy; February 15, 1825; Seven-feet Equatorial.

Position = 79° 33′ *sp*	5 Obs.	Diff. = 0° 39′	Difficult.
Distance = 37″.595	5 Obs.	Diff. = 0″.841	

Passy; February 17, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 79° 17′ *sp*	5 Obs.	Diff. = 1° 20′	Difficult.
Distance = 37″.970	5 Obs.	Diff. = 0″.841	

Passy; February 24, 1825; Portable Transit.

Observed R. A. of the larger star = $8^h\ 14'\ 43''.11$.

Mean Result.

Position 79° 25′ *sp*; Distance 37″.782; Epoch 1825.12.

No. DLXVIII. R. A. $8^h\ 17^m$; Decl. 23° 27′ S.

Nova;

Double; 6th and 9th magnitudes; small, blue.

Passy; February 21, 1825; Seven-feet Equatorial.

Position = 4° 32′ *nf*	5 Obs.	Diff. = 1° 11′	Difficult.
Distance = 40″.464	5 Obs.	Diff. = 0″.721	

Passy; February 23, 1825; Seven-feet Equatorial.

7th and 10th magnitudes.

Position = 5° 8′ *nf*	5 Obs.	Diff. = 1° 1′	Very difficult.
Distance = 41″.165	5 Obs.	Diff. = 0″.841	

Passy; March 12, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 5° 20′ *nf*	5 Obs.	Diff. = 1° 3′	Very difficult.
Distance = 40″.341	5 Obs.	Diff. = 1″.611	

Small star is blue, and does not bear a good illumination. Night tolerably clear, but stars of low altitude unsteady.

Mean Result.

Position 5° 0′ *nf* (15 Obs.); Distance 40″.635 (15 Obs.); Epoch 1825.16.

No. DLXIX. R. A. $8^h\ 23^m$; Decl. 25° 25′ S.

Nova;

Double; 8th and 10th magnitudes: small, blue.

Passy; February 19, 1825; Seven-feet Equatorial.

Position = 71° 34′ *n p* | 5 Obs. | Diff. = 1° 44′ } Excessively difficult.
Distance = 39″.033 | 5 Obs. | Diff. = 0″.649 }

The small star bears but the slightest illumination.

Passy; February 23, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 71° 33′ *n p* | 5 Obs. | Diff. = 1° 2′ } Excessively difficult.
Distance = 41″.649 ± | 2 Obs. | Diff. = 0″.360 }

Observations of distance little else than approximations.

Passy; February 25, 1825; Portable Transit.

Observed R. A. of the larger star = $8^h\ 22'\ 54''.88$.

Passy; March 18, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Distance = 39″.523 | 2 Obs. | Diff. = 0″.168. Excessively difficult.

The night is very fine, but the small star will not allow any illumination of the micrometer wires. Measures entitled to little confidence.

Mean Result.

Position 71° 34′ *n p* (10 Obs.); Epoch 1825.13;
Distance 39″.723 ± (9 Obs.); Epoch 1825.16.

No. DLXX. R.A. $8^h\ 29'$; Decl. $20°\ 15'$ N.

Nova;

Triple; A $8\frac{1}{2}$, B $9\frac{1}{2}$, and C of the 9th magnitudes.

Measures of A B.

Passy; February 19, 1825; Seven-feet Equatorial.

Position $= 6°\ 37'\ nf$ | 5 Obs. | Diff. $= 1°\ 3'$
Distance $= 57''.851$ | 5 Obs. | Diff. $= 0''.793$ } Difficult.

Passy; February 23, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position $6°\ 28'\ nf$ | 5 Obs. | Diff. $= 1°\ 4'$
Distance $57''.055$ | 5 Obs. | Diff. $= 0''.962$ } Very difficult.

Night hazy; the small star very faint.

Passy; March 12, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Distance $= 57''.605$ | 5 Obs. | Diff. $= 0''.601$. Very difficult.

The small star is blue, and bears but a very slight illumination.

Measures of A C.

Passy; February 19, 1825; Seven-feet Equatorial.

$8\frac{1}{2}$ and 9th magnitudes.

Position $= 75°\ 3'\ np$ | 3 Obs. | Diff. $= 0°\ 18'$
Distance $= 2'\ 57''.581$ | 3 Obs. | Diff. $= 0''.673$ . . . .

Passy; February 23, 1825; Seven-feet Equatorial.

$8\frac{1}{2}$ and 9th magnitudes.

Position $= 74°\ 25'\ np$ | 3 Obs. | Diff. $= 0°\ 38'$
Distance $= 2'\ 58''.394$ | 3 Obs. | Diff. $= 0''.625$ . . . .

Passy; March 19, 1825; Portable Transit.

Observed R. A. of the star A $= 8^h\ 29'\ 5''.18$.
——— Declination $= 20°\ 15'\ 16''$ N.

Mean Result.

of A B. Position $6°\ 32'\ nf$ (10 Obs.) Epoch 1825.14.
Distance $57''.517$ (15 Obs.); Epoch 1825.15.
of A C. Position $74°\ 44'\ np$ (6 Obs.); Distance $2'\ 57''.987$ (6 Obs.);
Epoch 1825.14.

No. DLXXI. R. A. $8^h\ 30^m$; Decl. 20° 8′ N.

Nova;

Triple; A $7\frac{1}{2}$, B 8th, and C of the 6th magnitudes.

Measures of A B.

Passy; February 17, 1825; Seven-feet Equatorial.

Position = 66° 57′ *s f*	5 Obs.	Diff. = 1° 8′
Distance = 44″.756	5 Obs.	Diff. = 0″.481

Passy; February 18, 1825; Seven-feet Equatorial.

$7\frac{1}{2}$ and 8th magnitudes.

Position = 67° 5′ *s f*	5 Obs.	Diff. = 1° 29′
Distance = 45″.318	5 Obs.	Diff. = 0″.913

Measures of A C.

Passy; February 17, 1825; Seven-feet Equatorial.

$7\frac{1}{2}$ and 6th magnitudes.

Position = 29° 1′ *s p*	5 Obs.	Diff. = 0° 36′
Distance = 1′ 32″.276	5 Obs.	Diff. = 0″.505

C being to the south of A.

Passy; February 18, 1825; Seven-feet Equatorial.

7th and 6th magnitudes.

Position = 29° 4′ *s p*	5 Obs.	Diff. 0° 17′
Distance = 1′ 32″.238	5 Obs.	Diff. 1″.443

The star C being to the south of A.

Passy; March 18, 1825; Portable Transit.

Observed R. A. of the star A = $8^h\ 29'\ 56''.31$.

——— Declination 20° 8′ 0″ N.

Mean Result.

of A B Position 67° 1′ *s f*; Distance 45″.037;

of A C Position 29° 2′ *s p*; Distance 1′ 32″.257;

Epoch 1825.13.

No. DLXXII. R. A. $8^h\ 30^m$; Decl. 20° 16′ N.

Nova;

Double; 7th and 9th magnitudes; small, blue.

Passy; February 19, 1825; Seven-feet Equatorial.

Position = 0° 16′ *nf*	5 Obs.	Diff. = 0° 33′	. . . .
Distance = 1′ 15″.811	5 Obs.	Diff. = 1″.058	

Passy; February 23, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 0° 17′ *nf*	5 Obs.	Diff. = 0° 32′	Difficult.
Distance = 1′ 16″.082	5 Obs.	Diff. = 1″.803	

Passy; March 21, 1825; Portable Transit.

Observed R. A. of the larger star = $8^h\ 30'\ 20''.43$.
——— Declination = 20° 16′ 7″ N.

Mean Result.

Position 0° 16′ *nf*; Distance 1′ 15″.946; Epoch 1825.14.

No. DLXXIII. R. A. $8^h\ 30^m$; Decl. 20° 15′ N.

Nova;

Double; 6th and 12th or 15th magnitudes; the small star is a mere point, yet bears a very tolerable illumination. The large star forms a triangle with the double star No. 572, itself being at the vertex of the triangle.

Passy; February 19, 1825; Seven-feet Equatorial.

Position = 37° 6′ *nf*	5 Obs.	Diff. = 1° 49′	Extremely difficult.
Distance = 20″.288	5 Obs.	Diff. = 1″.154	

Passy; February 25, 1825; Seven-feet Equatorial.

7th and 15th magnitudes.

Position = 36° 58′ *nf*	5 Obs.	Diff. = 1° 40′	Excessively difficult.
Distance = 21″.096	5 Obs.	Diff. = 1″.683	

No. DLXXIII. continued.

Passy; March 19, 1825; Portable Transit.

Observed R. A. of the larger star, $8^h\ 30'\ 21''.42$.
——— Declination = $20°\ 15'\ 5''$ N.

Passy; March 21, 1825; Seven-feet Equatorial.

I have tried several times, on different fine nights, to procure other measures of this double star; but although the weather has been particularly favourable, I have not been able to succeed. Is the small star variable?

Passy; April 6, 1825; Seven-feet Equatorial.

I have been again foiled in my endeavours to measure this double star; yet the night is beautifully clear. I can distinguish the small star, but under the least illumination it is invisible.

Mean Result.

Position $37°\ 2'$ *nf*; Distance $20''.692$; Epoch 1825.14.

No. DLXXIV. R. A. $8^h\ 30^m$; Decl. $20°\ 8'$ N.

Nova;

Double; 6th and 7th magnitudes: its larger star follows the star A of the triple star No. 571, about 31 seconds of time, and is about 28 seconds to the south of it.

Passy; February 17, 1825; Seven-feet Equatorial.

Position = $20°\ 59'$ *sp*	5 Obs.	Diff. = $0°\ 29'$
Distance = $2'\ 12''.449$	5 Obs.	Diff. = $0''.962$

Passy; February 18, 1825; Seven-feet Equatorial.

7th and 8th magnitudes.

Position = $21°\ 5'$ *sp*	5 Obs.	Diff. = $0°\ 18'$
Distance = $2'\ 13''.151$	5 Obs.	Diff. = $1''.755$

Passy; March 10, 1825; Portable Transit.

Observed R. A. of the larger star = $8^h\ 30'\ 27^s.22$.
——— Declination = $20°\ 7'\ 37''$ N.

Mean Result.

Position $21°\ 2'$ *sp*; Distance $2'\ 12''.803$; Epoch 1825.13.

No. DLXXV. R. A. $8^h\ 31^m$; Decl. 6° 25′ N.

STRUVE, 303; IV. 54.

Double; 8th and 10th magnitudes.

Passy; January 2, 1825; Seven-feet Equatorial.

Position = 59° 52′ *nf*	5 Obs.	Diff. = 1° 25′	Difficult.
Distance = 27″.711	5 Obs.	Diff. = 0″.937	

Passy; January 25, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 59° 43′ *nf*	5 Obs.	Diff. = 1° 40′	Difficult.
Distance = 27″.396	5 Obs.	Diff. = 0″.601	

Passy; April 7, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Distance = 27″.042 | 5 Obs. | Diff. = 0″.721. Difficult.

Mean Result.

Position 59° 47′ *nf* (10 Obs.); Epoch 1825.03;
Distance 27″.383 (15 Obs.); Epoch 1825.11.

This star has undergone no appreciable change, as the measures of 1783 gave Position 59° 24′ *nf* (mean of two measures); Distance 25″.7. (H.)

No. DLXXVI. R. A. $8^h\ 31^m$; Decl. 49° 30′ N.

STRUVE, 304; P. VIII. 131;

Double; 9½ and 10th magnitudes.

Passy; January 2, 1825; Seven-feet Equatorial.

Position = 61° 10′ *np*	5 Obs.	Diff. = 0° 54′	Difficult.
Distance = 10″.995	5 Obs.	Diff. = 0″.288	

Passy; January 25, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 60° 47′ *np*	5 Obs.	Diff. = 3° 47′	Very difficult.
Distance = 9″.671	5 Obs.	Diff. = 0″.745	

Passy; February 3, 1825; Seven-feet Equatorial.

9½ and 10th magnitudes.

Distance = 10″.289 | 6 Obs. | Diff. = 1″.034. Very difficult.

Mean Result.

Position 60° 58′ *np* (10 Obs.); Distance 10″.316 (16 Obs.);
Epoch 1825.05.

No. DLXXVII. R. A. $8^h\ 33^m$; Decl. 11° 33′ S.

STRUVE, 305; Hist. Cæl. 270;

Double; 9th and 10th magnitudes: both bluish.

Passy; January 2, 1825; Seven-feet Equatorial.

Position = 30° 55′ *n p*	7 Obs.	Diff. = 1° 53′	Extremely difficult.
Distance = 5″.475	5 Obs.	Diff. = 0″.721	

Passy; January 25, 1825; Seven-feet Equatorial.

9½ and 10th magnitudes.

Position = 31° 24′ *n p*	7 Obs.	Diff. = 5° 5′	Excessively difficult.
Distance = 5″.703	5 Obs.	Diff. = 0″.769	

Mean Result.

Position 31° 9′ *n p* (14 Obs.); Distance 5″.589 (10 Obs.); Epoch 1825.03.

No. DLXXVIII. R. A. $8^h\ 33^m$; Decl. 11° 16′ S.

Nova;

Double; 8th and 11th, or 12th magnitudes.

Passy; February 21, 1825; Seven-feet Equatorial.

Position = 32° 4′ *n p*	5 Obs.	Diff. = 1° 42′	Extremely difficult.
Distance = 30″.970	5 Obs.	Diff. = 1″.202	

Observations of distance perhaps a little doubtful.

Passy; February 24, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 32° 13′ *n p*	5 Obs.	Diff. = 0° 30′	Extremely difficult.
Distance = 30″.646	5 Obs.	Diff. = 1″.827	

The small star is blue, and bears only the most feeble illumination.

Mean Result.

Position 32° 6′ *n p*; Distance 30″.808; Epoch 1825.14.

No. DLXXIX. R. A. $8^h\ 35^m$; Decl. $6°\ 35'$ S.

31 Monocerotis; SOUTH'S Catalogue; VI. 82.

Double; 6th and 9th magnitudes; small, blue.

Passy; January 2, 1825; Seven-feet Equatorial.

Position = 38° 36′ *np*	5 Obs.	Diff. = 0° 56′
Distance = 1′ 17″.520	5 Obs.	Diff. = 0″.481

Passy; January 17, 1825; Seven-feet Equatorial.

6th and 9th magnitudes.

Position = 38° 34′ *np*	5 Obs.	Diff. = 1° 6′
Distance = 1′ 18″.316	5 Obs.	Diff. = 0″.697

Mean Result.

Position 38° 35′ *np*; Distance 1′ 17″.918; Epoch 1824.02.

The angle of position of this star as measured in 1783 was 40° 0′ *np*, differing only 1° 25′ from the present. (H.)

No. DLXXX. R. A. $8^h\ 36^m$; Decl. 1° 57′ S.

STRUVE, 308; P. VIII. 160.

Double; 8½ and 9th magnitudes; small, blue.

Passy; January 2, 1825; Seven-feet Equatorial.

Position = 12° 2′ *sp*	5 Obs.	Diff. = 0° 52′
Distance = 4″.374	5 Obs.	Diff. = 0″.913

Passy; January 17, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 11° 6′ *sp*	5 Obs.	Diff. = 1° 49′
Distance = 5″.487	5 Obs.	Diff. = 0″.336

Passy; February 3, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Distance = 4″.991 | 5 Obs. | Diff. = 0″.673.

Mean Result.

Position 11° 34′ *sp* (10 Obs.); Epoch 1824.02;

Distance 4″.951 (15 Obs.); Epoch 1825.04.

No. DLXXXI. R. A. $8^h\ 37^m$; Decl. 11° 50′ N.

Struve, 309; Hist. Cæl. 218.

Double; 9th and 9½ magnitudes.

Passy; January 29, 1825; Seven-feet Equatorial.

Position = 82° 24′ *np*	6 Obs.	Diff. = 3° 5′	Very difficult.
Distance = 13″.758	5 Obs.	Diff. = 0″.986	

Night extremely favourable; but neither star bears sufficient illumination.

Passy; February 3, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 84° 11′ *np*	5 Obs.	Diff. = 1° 1′	Very difficult.
Distance = 12″.945	5 Obs.	Diff. = 0″.841	

Passy; February 11, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 84° 0′ *np*	5 Obs.	Diff. = 1° 1′	Very difficult.
Distance = 13″.279	6 Obs.	Diff. = 0″.601	

Thermometer stands at 28°; no dew on the object-glass; but on the polar axis there has been a considerable quantity, throughout the night.

Mean Result.

Position 83° 27′ *np* (16 Obs.); Distance 13″.324 (16 Obs.); Epoch 1825.09.

No. DLXXXII. R. A. $8^h\ 39^m$; Decl. 35° 45′ N.

130 (Bode) Lyncis; Struve, 310; Hist. Cæl. 220.

A very neat double star; nearly equal; 9th and 9¼ magnitudes, and bear a very good illumination.

Blackman-street; March 12, 1824; Five-feet Equatorial.

Position = 7° 30′ *sf*	5 Obs.	Diff. = 1° 0′	. . . . .
Distance = 3″.556	5 Obs.	Diff. = 0″.632	

Blackman-street; March 31, 1824; Five-feet Equatorial.

Equal; each 9th magnitude.

Position = 7° 43′ *sf* or *np*	5 Obs.	Diff. = 1° 58′	. . . . .
Distance = 3″.767	5 Obs.	Diff. = 0″.529	

Mean Result.

Position 7° 36′ *sf* or *np*; Distance 3″.661; Epoch 1824.22.

No. DLXXXIII. R. A. $8^h\ 41^m$; Decl. 33° 9′ N.

σ' Cancri; STRUVE, 312; VI. 86.

Double; 7th and 15th magnitudes; small, blue.

Passy; February 6, 1825; Seven-feet Equatorial.

Position = 66° 53′ *nf*	5 Obs.	Diff. = 1° 30′	Excessively difficult.
Distance = 1′ 22″.449 ±	5 Obs.	Diff. = 5″.891	

The small star is not visible under the slightest illumination of the wires; the observed distances are perhaps little better than approximations.

Passy; February 9, 1825; Seven-feet Equatorial.

7th and 15th magnitudes.

Position = 66° 36′ *nf*	6 Obs.	Diff. = 1° 22′	Extremely difficult.
Distance = 1′ 21″.521 ±	3 Obs.	Diff. = 1″.034	

Mean Result.

Position 66° 44′ *nf* (11 Obs.); Distance 1′ 22″.101 ± (8 Obs.);

Epoch 1825.10;

Sir W. HERSCHEL has given no measures of this star. (H.)

No. DLXXXIV. R. A. $8^h\ 47^m$; Decl. 10° 43′ S.

Nova;

Double; 8th and 10th magnitudes; small, blue.

Passy; March 23, 1825; Seven-feet Equatorial.

Position = 58° 37′ *sp*	5 Obs.	Diff. = 0° 37′	Extremely difficult.
Distance = 1′ 11″.022	5 Obs.	Diff. = 1″.563	

The stars only visible by glimpses. Night almost uniformly cloudy; the results are perhaps a little inaccurate.

Passy; March 24, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 59° 0′ *sp*	5 Obs.	Diff. = 0° 37′	Very difficult.
Distance = 1′ 11″.356	5 Obs.	Diff. = 0″.913	

Mean Result.

Position 58° 49′ *sp*; Distance 1′ 11″.189; Epoch 1825.22.

No. DLXXXV. R. A. $8^h\ 47^m$; Decl. 17° 34′ S.

Nova;

Double; 6th and 7th magnitudes.

Passy; March 19, 1825; Seven-feet Equatorial.

Position = 53° 9′ *sf*	5 Obs.	Diff. = 0° 56′	
Distance = 1′ 9″.298	5 Obs.	Diff. = 0″.841	

Passy; March 21, 1825; Seven-feet Equatorial.

6th and 7th magnitudes.

Position = 53° 20′ *sf*	5 Obs.	Diff. = 0° 56′	
Distance = 1′ 9″.594	5 Obs.	Diff. = 0″.432	

Passy; March 21, 1825; Portable Transit.

Observed R. A. of the larger star = $8^h\ 47'\ 12''.59$.

Passy; March 24, 1825; Seven-feet Equatorial.

6th and 7th magnitudes.

Position = 53° 8′ *sf*	5 Obs.	Diff. = 1° 16′	Unsteady.
Distance = 1′ 9″.197	5 Obs.	Diff. = 1″.659	

Measured inadvertently, being unaware that the star had been already well observed.

Mean Result.

Position 53° 12′ *np* (15 Obs.); Distance 1′ 9″.363 (15 Obs.); Epoch 1825.22.

No. DLXXXVI. R. A. $8^h\ 50^m$; Decl. 32° 57′ N.

σ^4 Cancri; STRUVE, 318.

Double; 6th and 10th magnitudes; small, blue.

Passy; January 6, 1825; Seven-feet Equatorial.

Position = 45° 0′ *sf*	5 Obs.	Diff. = 2° 23′	Very difficult.
Distance = 4″.594	5 Obs.	Diff. = 0″.456	

Passy; January 25, 1825; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = 45° 46′ *sf*	6 Obs.	Diff. = 8° 30′	Extremely difficult.
Distance = 5″.107	5 Obs.	Diff. = 0″.865	

The small star is blue, and scarcely bears any illumination. Night particularly fine, but the dew on the object-glass is sadly troublesome.

Mean Result.

Position 45° 25′ *sf* (11 Obs.); Distance 4″.850 (10 Obs.); Epoch 1825.04.

No. DLXXXVII. R. A. $8^h\ 52^m$; Decl. 82° 8′ N.

Nova;

Double; 8th and 12th magnitudes; small, blue.

Passy; March 21, 1825; Seven-feet Equatorial.

Position = 48° 56′ *np* | 5 Obs. | Diff. = 0° 33′
Distance = 24″.174 | 5 Obs. | Diff. = 2″.957
} Excessively difficult.

The small star becomes invisible, under very slight illumination.

Passy; March 26, 1825; Seven-feet Equatorial.

9th and 11th magnitudes.

Position = 48° 59′ *np* | 5 Obs. | Diff. = 2° 40′
Distance = 24″.510 | 5 Obs. | Diff. = 1″.082
} Extremely difficult.

Mean Result.

Position 48° 57′ *np*; Distance 24″.342; Epoch 1825.22.

No. DLXXXVIII. R. A. $8^h\ 55^m$; Decl. 16° 57′ S.

Nova;

Double; $8\frac{1}{2}$ and 9th magnitudes.

Passy; February 25, 1825; Seven-feet Equatorial.

Position = 59° 3′ *np* | 5 Obs. | Diff. = 1° 25′
Distance = 30″.060 | 5 Obs. | Diff. = 1″.034
} Difficult.

Night very hazy; Thermometer stands at 28°; no dew on the object-glass; but the polar axis is covered with hoar frost.

Passy; March 2, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 58° 34′ *np* | 5 Obs. | Diff. = 1° 44′
Distance = 30″.405 | 5 Obs. | Diff. = 1″.274
} Very difficult.

Passy; March 21, 1825; Portable Transit.

Observed R. A. of the larger star = $8^h\ 55'\ 7''.10$.

Mean Result.

Position 58° 48′ *np*; Distance 30″.232; Epoch 1825.15.

No. DLXXXIX. R. A. $8^h\ 57^m$; Decl. 3° 31′ N.

STRUVE, 324; Hist. Cæl. 258.

Double; equal; each 9½ magnitude, and bear but little illumination.

Blackman-street; March 12, 1824; Five-feet Equatorial.

Position = 2° 15′ *sf* or *np*	5 Obs.	Diff. = 3° 5′	Difficult.
Distance = 12″.115	5 Obs.	Diff. = 0″.853	

Night very favourable.

Blackman-street; April 2, 1824; Five-feet Equatorial.

9½ and 10th magnitudes.

Position = 2° 55′ *sf*	5 Obs.	Diff. = 1° 35′	Very difficult.
Distance = 12″.165	5 Obs.	Diff. = 0″.032	

Mean Result.

Position 2° 35′ *sf* or *np*; Distance 12″.140; Epoch 1824.22.

No. DXC. R. A. $8^h\ 58^m$; Decl. 53° 6′ N.

STRUVE, 325;

Double; 9th and 11th magnitudes; small, blue.

Passy; February 6, 1825; Seven-feet Equatorial.

Position = 55° 44′ *sf*	6 Obs.	Diff. = 4° 27′	Extremely difficult.
Distance = 5″.662	5 Obs.	Diff. = 0″.481	

Passy; February 9, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 57° 16′ *sf*	5 Obs.	Diff. = 2° 13′	Very difficult.
Distance = 5″.364	5 Obs.	Diff. = 0″.529	

Night very favourable.

Mean Result.

Position 56° 31′ *sf* (11 Obs.); Distance 5″.513 (10 Obs); Epoch 1825.10.

No. DXCI. R. A. $9^h\ 0^m$; Decl. 16° 0′ N.

Nova;

Double; 9th and 12th magnitudes.

Passy; February 19, 1825; Seven-feet Equatorial.

Position = 29° 51′ *nf* / Distance = 7″.598	7 Obs. / 5 Obs.	Diff. = 4° 8′ / Diff. = 0″.577	Extremely difficult.

Passy; February 24, 1825; Seven-feet Equatorial.

9th and 12th magnitudes.

Position = 30° 2′ *nf* / Distance = 7.″670	7 Obs. / 5 Obs.	Diff. = 1° 35′ / Diff. = 0″.240	Extremely difficult.

Mean Result.

Position 29° 56′ *nf* (14 Obs.); Distance 7″.634 (10 Obs.);
Epoch 1825.14.

No. DXCII. R. A. $9^h\ 1^m$; Decl. 58° 28′ N.

STRUVE, 328;

Double; equal; each of the 8th magnitude.

Blackman-street; March 31, 1824; Five-feet Equatorial.

Position = 44° 18′ *sp* or *nf* | 5 Obs. | Diff. = 1° 31′ . . . .

Blackman-street; April 2, 1824; Five-feet Equatorial.

7½ and 8th magnitudes.

Position = 44° 9′ *nf* / Distance = 20.″667	5 Obs. / 5 Obs.	Diff. = 1° 20′ / Diff. = 0″.947	. . . .

Passy; February 6, 1825; Seven-feet Equatorial.

Equal; each of the 8th magnitude.

Distance = 20″.925 | 5 Obs. | Diff. = 1″.202 . . .

Night tolerably good; a small quantity of dew has fallen upon the object-glass, but the polar axis, which during the former part of the night has been very wet, is now coated with ice. Thermometer 28°.

Mean Result.

Position 44° 13′ *nf*; Epoch 1824.25; Distance 20″.796;
Epoch 1824.67.

No. DXCIII. R. A. $9^h\ 4^m$; Decl. 79° 15′ N.

Nova;

Double; 8½ and 9th magnitudes; bear a very good illumination; their juxta-polar situation, and their position (so near the perpendicular), render them admirably adapted for parallax observations.

Passy; March 18, 1825; Seven-feet Equatorial.

Position = 81° 14′ *sf* | 5 Obs. | Diff. = 0° 32′
Distance = 29″.384 | 5 Obs. | Diff. = 0″.144 . . . . .

Passy; March 21, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 81° 14′ *sf* | 5 Obs. | Diff. = 1° 24′
Distance = 29″.256 | 5 Obs. | Diff. = 0″.481 . . . . .

Mean Result.

Position 81° 14′ *sf*; Distance 29″.320; Epoch 1825.21.

No. DXCIV. R. A. $9^h\ 7^m$; Decl. 24° 24′ N.

Struve, 332; Hist. Cæl. 215;

Double; 9½ and 10th magnitudes.

Passy; January 2, 1825; Seven-feet Equatorial.

Position = 73° 38′ *nf* | 8 Obs. | Diff. = 1° 55′
Distance = 7″.302 | 5 Obs. | Diff. = 0″.481 } Very difficult.

Passy; February 3, 1825; Seven-feet Equatorial.

9½ and 10th magnitudes.

Position = 73° 4′ *nf* | 5 Obs. | Diff. = 1° 35′. Very difficult.

Night is become cloudy; no more observations can be made.

Passy; February 5, 1825; Seven-feet Equatorial.

9½ and 10th magnitudes.

Distance = 6″.912 | 5 Obs. | Diff. = 0″.456. Very difficult.

Mean Result.

Position 73° 25′ *nf* (13 Obs.; Epoch 1825.04;
Distance 7″.107 (10 Obs.); Epoch 1825.06.

No. DXCV. R. A. $9^h\ 10'$; Decl. $19°\ 35'$ S.

Nova;

Double; $8\frac{1}{2}$ and 10th magnitudes.

Passy; February 19, 1825; Seven-feet Equatorial.

Position $= 10°\ 7'\ np$	5 Obs.	Diff. $= 1°\ 27'$	Very difficult.
Distance $= 1'\ 1''.169$	5 Obs.	Diff. $= 0''.937$	

The small star bears but very little illumination.

Passy; February 24, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position $= 9°\ 57'\ np$	5 Obs.	Diff. $= 0°\ 32'$	Extremely difficult.
Distance $= 1'\ 1''.126$	5 Obs.	Diff. $= 1''.491$	

Passy; March 21, 1825; Portable Transit.

Observed R. A. of the larger star $= 9^h\ 10'\ 25''.98$.

Mean Result.

Position $10°\ 2'\ np$; Distance $1'\ 1''.147$; Epoch 1825.14.

No. DXCVI. R. A. $9^h\ 10'$; Decl. $50°\ 18'$ N.

39 Lyncis; STRUVE, 335.

Double; 8th and 10th magnitudes; small, blue.

Passy; January 2, 1825; Seven-feet Equatorial.

Position $= 50°\ 1'\ np$	5 Obs.	Diff. $= 4°\ 22'$	Very difficult.
Distance $= 5''.729$	5 Obs.	Diff. $= 0''.865$	
Position $= 49°\ 33'\ np$	5 Obs.	Diff. $= 3°\ 30'$	
Position $= 49°\ 2'\ np$	5 Obs.	Diff. $= 2°\ 45'$	

Passy; January 17, 1825; Seven-feet Equatorial.

8th and 10th or 11th magnitudes.

Position $= 47°\ 48'\ np$	6 Obs.	Diff. $= 6°\ 12'$	Extremely difficult.
Distance $= 6''.400$	5 Obs.	Diff. $= 0''.721$	

Passy; February 24, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position $= 50°\ 34'\ np$	15 Obs.	Diff. $= 2°\ 44'$	Satisfactory.
Distance $= 6''.049$	5 Obs.	Diff. $= 0''.601$	

Stars admirably defined, and are remarkably steady; the small one is blue. The observations were gotten with the greatest facility.

Mean Result.

Position $49°\ 40'\ np$ (36 Obs.); Distance $6''.059$ (15 Obs.); Epoch 1825.06.

No. DXCVII. R. A. $9^h\ 14^m$; Decl. $4°\ 17'$ N.

STRUVE, 338; Hist. Cæl. 324;

Double; 8th and 9th magnitudes; small, blue.

Passy; January 2, 1825; Seven-feet Equatorial.

Position = 40° 31′ *np*	5 Obs.	Diff. = 2° 34′	
Distance = 22″.195	5 Obs.	Diff. = 0″.312	. . . .

Passy; January 6, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 40° 20′ *np*	5 Obs.	Diff. 2° 15′	
Distance = 22″.143	5 Obs.	Diff. 0″.408	. . . .

Mean Result.

Position 40° 25′ *np*; Distance 22″.169; Epoch 1825.01.

No. DXCVIII. R. A. $9^h\ 17'$; Decl. 46° 26′ N.

STRUVE, 339; IV. 55;

Double; 6th and $8\frac{1}{2}$ magnitudes; small, blue.

Blackman-street; April 12, 1824; Five-feet Equatorial.

Position = 71° 18′ *sf*	5 Obs.	Diff. 0° 12′	SOUTH.	
Distance = 1′ 26″.797	5 Obs.	Diff. 0″.727		
Position = 71° 17′ *sf*	5 Obs.	Diff. 0° 53′	Mr. RICHARDSON.	. .
Distance = 1′ 27″.075	5 Obs.	Diff. 0″.821		

Passy; January 6, 1825; Seven-feet Equatorial.

7th and 9th magnitudes.

Position = 71° 59′ *sf*	5 Obs.	Diff. = 0° 56′	
Distance = 1′ 26″.119	5 Obs.	Diff. = 0″.384	. . . .

Passy; February 20, 1825; Seven-feet Equatorial.

6th and 9th magnitudes.

Distance = 1′ 26″.605	5 Obs.	Diff. 0″.673	. . . .

Mean Result.

Position 71° 31′ *sf* (15 Obs.); Epoch 1824.64;

Distance 1′ 26″.649 (20 Obs.); Epoch 1824.81.

No. DXCIX. R. A. $9^h\ 18^m$; Decl. $7°\ 1'$ N.

STRUVE, 341; Hist. Cæl. 273.

Double; equal; each of the 10th magnitude.

Passy; January 17, 1825; Seven-feet Equatorial.

Distance = 3″.780 | 5 Obs. | Diff. = 0″.937. Excessively difficult.

Passy; February 5, 1825; Seven-feet Equatorial.

9½ and 10th magnitudes.

Position = 58° 55′ *n p* | 5 Obs. | Diff. = 3° 3′
Distance = 3″.450 | 5 Obs. | Diff. = 0″.697 } Extremely difficult.

Passy; March 2, 1285; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 56° 29′ *n p* | 5 Obs. | Diff. = 2° 42′
Distance = 3″.251 | 5 Obs. | Diff. = 0″.336 } Very difficult.

Passy; March 26, 1825; Seven-feet Equatorial.

Equal; each of the 10th magnitude.

Position = 57° 38′ *n p* or *s f* | 5 Obs. | Diff. = 4° 42′
Distance = 3″.572 | 5 Obs. | Diff. = 0″.601 } Extremely difficult.

Mean Result.

Position 57° 41′ *n p* or *s f* (15 Obs.); Distance 3″.513 (20 Obs.); Epoch 1825.18.

No. DC. R. A. $9^h\ 19^m$; Decl. 9° 50′ N.

ω^3 Leonis; STRUVE, 342; I. 26.

Double; large, white; small, pale blue.

Royal Observatory, Paris; March 15, 1825; Eleven-feet Achromatic by LEREBOURS, having an object-glass of 8.4 English inches clear aperture.

With a power of 420 the small star is separated half a diameter of the large star; with 560 three-fourths of a diameter; with each power the stars are admirably defined, and as round as possible: had we any micrometrical apparatus, measures of position and distance might be gotten with the greatest facility. Mons. BOUVARD present. Night favourable.

Whether the Seven-feet Equatorial will enable me to measure this close double star I do not know; the highest power that can be applied to its present micrometer is 273, which is certainly inadequate to show the star *double*.*

* By a letter from Mr. HERSCHEL, dated May 14, 1825, I find that Mr. STRUVE has measured this star with his telescope of 9 inches aperture, and 14 feet focal length, made by FRAUNHOFER.

No. DCI. R. A. $9^h\ 21^m$; Decl. 73° 52′ N.

STRUVE, 345;

Double; equal; each of the 8th magnitude.

Blackman-street; April 12, 1824; Five-feet Equatorial.

Position = 44° 37′ *np* or *sf*	5 Obs.	Diff. = 2° 7′	SOUTH.	.
Distance = 5″.144	5 Obs.	Diff. = 0″.727		
Position = 42° 56′ *np* or *sf*	5 Obs.	Diff. = 1° 8′	Mr. RICHARDSON.	
Distance = 4″.822	5 Obs.	Diff. = 1″.136		

Passy; February 20, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 45° 35′ *sf*	5 Obs.	Diff. = 1° 25′	. . . .
Distance = 5″.003	5 Obs.	Diff. = 0″.456	

Passy; March 18, 1825; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 45° 38′ *sf*	5 Obs.	Diff. = 2° 15′	. . . .
Distance = 5″.393	5 Obs.	Diff. = 0″.456	

Mean Result.

Position 44° 41′ *sf* (20 Obs.); Distance 5″.090 (20 Obs.);
Epoch 1824.87.

No. DCII. R. A. $9^h\ 23^m$; Decl. 2° 16′ N.

STRUVE, 347;

Double; 9th and 9½ magnitudes, and bear a very tolerable illumination; the small star is blue.

Passy; February 9, 1825; Seven-feet Equatorial.

Position = 74° 51′ *sf*	5 Obs.	Diff. = 1° 46′	. . .
Distance = 3″.584	5 Obs.	Diff. = 0″.505	

Night remarkably fine.

Passy; February 17, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 73° 41′ *sf*	5 Obs.	Diff. = 3° 9′	. . .
Distance = 3″.948	5 Obs.	Diff. = 0″.553	

Mean Result.

Position 74° 16′ *sf*; Distance 3″.766; Epoch 1825.11.

No. DCIII. R. A. $9^h\ 24^m$; Decl. 40° 46′ N.

STRUVE, 349; Hist. Cæl. 215;

Triple; A 7th, B $8\frac{1}{2}$, and C of the 9th magnitudes.

Measures of A B.

Blackman-street; March 31, 1824; Five-feet Equatorial.

Position = 56° 43′ *sf* | 5 Obs. | Diff. = 1° 32′
Distance = 24″.656 | 5 Obs. | Diff. = 1″.010

Blackman-street; April 2, 1824; Five-feet Equatorial.

7th and $8\frac{1}{2}$ magnitudes.

Position = 58° 5′ *sf* | 5 Obs. | Diff. = 1° 42′
Distance = 24″.507 | 5 Obs. | Diff. = 0″.600

The small star is decidedly blue.

Passy; February 20, 1825; Seven-feet Equatorial.

7th and $8\frac{1}{2}$ magnitudes.

Position = 56° 33′ *sf* | 5 Obs. | Diff. = 0° 38′.

Measures of A C.

Blackman-street; March 31, 1824; Five-feet Equatorial.

7th and 9th magnitudes.

Position = 55° 40′ *np* | 3 Obs. | Diff. = 0° 10′
Distance = 1′ 58″.364 | 3 Obs. | Diff. = 1″.832 } Difficult.

The star C is very indistinct.

Blackman-street; April 2, 1824; Five-feet Equatorial.

7th and 9th magnitudes.

Position = 55° 10′ *np* | 3 Obs. | Diff. = 0° 5′
Distance = 1′ 58″.853 | 3 Obs. | Diff. = 1″.010

Mean Result.

of A B. Position 57° 7′ *sf* (15 Obs.); Epoch 1824.54;
Distance 24″.581 (10 Obs.); Epoch 1824.25.
of A C. Position 55° 25′ *np* (6 Obs.); Distance 1′ 58″.608 (6 Obs.); Epoch 1824.25.

No. DCIV. R. A. $9^h\ 27^m$; Decl. 18° 48′ S.

Nova;

Double; 7th and 11th magnitudes.

Passy; February 21, 1825; Seven-feet Equatorial.

Position = 1° 0′ *sf*	5 Obs.	Diff. = 0° 50′	Excessively difficult.
Distance = 51″.756	5 Obs.	Diff. = 1″.322	

The small star is extremely obscure, and the measures of distance are perhaps a little questionable.

Passy; February 21, 1825; Portable Transit.

Observed R. A. of the larger star = $9^h\ 27'\ 28''.28$.

Passy; March 24, 1825; Seven-feet Equatorial.

7th and 11th magnitudes.

Position 0° 0′; following	5 Obs.	Diff. = 1° 3′	Excessively difficult.
Distance = 51″.924	5 Obs.	Diff. = 1″.010	

Before the mean angle was known, the position wire was placed at Zero, and the large star being bisected by it, I could not satisfy myself whether to assign the small one to the north or south quadrants. The measures, particularly of distance, may be liable to a slight inaccuracy, for the small star will scarcely bear any illumination. Night fine.

Mean Result.

Position 0° 30′ *sf*; Distance 51″.840; Epoch 1825.17.

No. DCV. R. A. $9^h\ 45^m$; Decl. 5° 48′ N.

9 Sextantis; STRUVE, 352; Hist. Cæl. 327.

Double; 7th and 9th magnitudes; small, blue.

Passy; January 2, 1825; Seven-feet Equatorial.

Position = 22° 38′ *np*	5 Obs.	Diff. = 0° 18′	Steady.
Distance = 51″.034	5 Obs.	Diff. = 0″.649	

Passy; January 6, 1825; Seven-feet Equatorial.

7th and 9th magnitudes.

Position = 22° 48′ *np*	5 Obs.	Diff. = 1° 33′	Good observations.
Distance = 51″.010	5 Obs.	Diff. = 1″.058	

The past has been a night such as rarely, very rarely occurs; from five o'clock in the afternoon till now, (four o'clock in the morning,) the stars have been unusually tranquil, and most exquisitely defined. At the commencement of the observations the Thermometer in the observatory stood at 31°, and it has gradually fallen to 23°. The deposition of moisture on the interior surface of the object-glass, and its

No. DCV. continued.

crystallisation on the exterior surface, have been so considerable, although an attached deal tube projects twelve inches beyond it, that I have been obliged to remove it very frequently; but no trouble is too great to obtain measures, under circumstances so *peculiarly* favourable. Twenty stars have been observed, amongst them several of the most difficult, and some which I have never before seen *double*. Now however the dew is not confined to the parts of the telescope in the neighbourhood of the object-glass, but has attacked the wires of the micrometer; they have a serrated appearance; and I suspect begin to "fiddle." Prudence advises me to relinquish observing, lest by persevering they should become broken. Many nights since my abode here, the dew has been far more copious, than I ever observed it to be in England; frequently the water has dripped off the instrument for several successive hours, but I never had any reason to suspect the slightest precipitation of moisture on the micrometer wires. The polar axis and object-end of the telescope, which in the earlier parts of the night were covered with hoar frost, are now coated with ice.

Mean Result.

Position 22° 43′ *np* (10 Obs.); Distance 51″.022 (10 Obs.); Epoch 1825.01.

No. DCVI. R. A. $9^h\ 47^m$; Decl. 20° 37′ N.

STRUVE, 353; Hist. Cæl. 212.

Double; 8th and 10th magnitudes; small, blue.

Passy; January 2, 1825; Seven-feet Equatorial.

Position = 85° 17′ *sf*	5 Obs.	Diff. = 1° 8′	Difficult.
Distance = 29″.725	5 Obs.	Diff. = 0″.312	

Passy; February 5, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 84° 6′ *sf*	5 Obs.	Diff. = 1° 19′	Difficult.
Distance = 30″.417	5 Obs.	Diff. = 0″.529	

Night very fine. Snow on the ground five or six inches deep. Thermometer in the observatory stands at 27°.5. No dew on the object-glass.*

Mean Result.

Position 84° 41′ *sf*; Distance 30″.071; Epoch 1825.04.

* To obviate the annoyance occasioned by the dew, wadding, such as is here employed in the manufacture of Ladies' pelisses, was on February 1st placed to a thickness of three-quarters of an inch, around the tube to which the micrometer is attached, to that of wood applied to the object-end, and to all the telescope tube projecting beyond the declination circle of the instrument: it has to a very considerable extent answered the purpose. Passy, October 22, 1825.

No. DCVII. R. A. $9^h\ 58^m$; Decl. $18°\ 26'$ S.

STRUVE, 356; Hist. Cæl. 283.

Double; equal; each $9\frac{1}{2}$ or 10th magnitudes; bluish, and scarcely bear any illumination.

Passy; February 9, 1825; Seven-feet Equatorial.

Position $= 55°\ 48'$ *np* or *sf*	5 Obs.	Diff. $= 2°\ 31'$	}	Extremely difficult.
Distance $= 11''.447$	5 Obs.	Diff. $= 0''.553$	}	

Passy; February 24, 1825; Seven-feet Equatorial.

Equal; each of the 10th magnitude.

Position $= 56°\ 36'$ *np* or *sf*	5 Obs.	Diff. $= 1°\ 59'$	}	Extremely difficult.
Distance $= 11''.257$	5 Obs.	Diff. $= 0''.962$	}	

Mean Result.

Position $56°\ 12'$ *np* or *sf*; Distance $11''.352$; Epoch 1825.12.

No. DCVIII. R. A. $10^h\ 16^m$; Decl. $9°\ 39'$ N.

STRUVE, 363; I. 29.

Double; 9th and 10th magnitudes; small, blue.

Passy; February 9, 1825; Seven-feet Equatorial.

Position $= 23°\ 58'$ *nf*	6 Obs.	Diff. $= 3°\ 50'$	}	Very, or extremely difficult.
Distance $= 2''.760$	6 Obs.	Diff. $= 0''.889$	}	

These stars are admirably defined, and are as steady as possible. Observed when on the meridian. The night is particularly favourable for delicate observations.

Passy; March 24, 1825; Seven-feet Equatorial.

9th and 11th magnitudes.

Position $= 27°\ 45'$ *nf*	8 Obs.	Diff. $= 6°\ 28'$	}	Excessively difficult.
Distance $= 5''.734$	5 Obs.	Diff. $= 0''.432$	}	

The small star is blue, and scarcely bears any illumination.

Passy; March 28, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position $= 25°\ 13'$ *nf*	5 Obs.	Diff. $= 2°\ 34'$	}	Excessively difficult.
Distance $= 3''.981$	5 Obs.	Diff. $= 0''.481$	}	

Night very fine; but the small star, which is blue, bears only the most feeble illumination.

No. DCVIII. continued.

Passy; March 29, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 24° 28′ *nf* | 5 Obs. | Diff. = 4°.45′ } Excessively difficult.
Distance = 4″.255 | 5 Obs. | Diff. = 0″.745 }

These observations, particularly of distance, do not accord so well as might be wished; the star however is one which presents considerable difficulty: this circumstance must plead their excuse. By allowing all the measures equal weight, I apprehend we shall not err much from the truth, when we give as the

Mean Result.

Position 26° 1′ *nf* (24 Obs.); Distance 3″.632 (21 Obs.); Epoch 1825.20.

This star offers not the least evidence of change either in position or distance. The angle of 1782 differs only 31′ from that here assigned; and the distance (2 diameters) for stars of this magnitude may (from centre to centre) amount to about 4″. (H.)

No. DCIX. R. A. 10^h 22^m; Decl. 22° 58′ N.

STRUVE, 364; Hist. Cæl. 150.

Double; 9th and 9½ magnitudes, and bear a very tolerable illumination.

Passy; February 9, 1825; Seven-feet Equatorial.

Position = 65° 50′ *sf* | 5 Obs. | Diff. = 0° 48′ }
Distance = 14″.588 | 5 Obs. | Diff. = 1″.274 } . . . .

Passy; February 28, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 65° 51′ *sf* | 5 Obs. | Diff. = 0° 24′ }
Distance = 14″.090 | 5 Obs. | Diff. = 0″.649 } . . . .

Passy; March 10, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 64° 50′ *sf* | 5 Obs. | Diff. = 0° 38′ }
Distance = 13″.938 | 5 Obs. | Diff. = 0″.649 } . . . .

Mean Result.

Position 65° 30′ *sf* (15 Obs.); Distance 14″.205 (15 Obs.); Epoch 1825.09.

No. DCX. R. A. $10^h\ 26^m$; Decl. 16° 54′ S.

Nova;

Double; 10th and $10\frac{1}{2}$ magnitudes.

Passy; February 23, 1825; Seven-feet Equatorial.

Position = 54° 4′ *nf*	5 Obs.	Diff. = 1° 9′	}	Excessively difficult.
Distance = 1′ 40″.618±	1 Obs.		}	

The distance is probably little better than a guess.

Passy; March 24, 1825; Seven-feet Equatorial.

10th and 11th magnitudes.

Position = 54° 9′ *nf*	5 Obs.	Diff. = 0° 55′	}	Excessively difficult.
Distance = 1′ 40″.915	5 Obs.	Diff. = 1″.731	}	

An illumination sufficient to render the micrometer wires distinct, obliterates both the stars.

Mean Result.

Position 54° 6′ *nf* (10 Obs.); Distance 1′ 40″.865 (6 Obs); Epoch 1825.18.

No. DCXI. R. A. $10^h\ 38^m$; Decl. 13° 49′ S.

Nova;

Double; 10th and 11th magnitudes.

Passy; February 24, 1825; Seven-feet Equatorial.

Position = 76° 51′ *sp*	5 Obs.	Diff. = 0° 45′	}	Excessively difficult.
Distance = 58″.967±	5 Obs.	Diff. = 1″.130	}	

Measures of distance somewhat of a suspicious character. The stars will scarcely bear any illumination.

Passy; March 24, 1825; Seven-feet Equatorial.

11th and 12th magnitudes.

Position = 75° 40′ *sp*	5 Obs.	Diff. = 0° 55′	}	Excessively difficult.
Distance = 59″.695	5 Obs.	Diff. = 1″.154	}	

When the field of view is but very slightly illuminated, the stars cannot be seen without the greatest attention.

Mean Result.

Position 76° 15″ *sp*; Distance 59″.331; Epoch 1825.18.

No. DCXII. R. A. $10^h\ 36^m$; Decl. 31° 37′ N.

42 Leonis minoris; STRUVE, 366; Hist. Cæl. 506;

Double; 6th and 8th magnitudes.

Passy; March 12, 1825; Seven-feet Equatorial.

Position = 82° 35′ *sf*	5 Obs.	Diff. = 0° 14′
Distance = 3′ 20″.062	5 Obs.	Diff. = 0″.649

Observed when 1¼ hour east of the meridian.

Passy; March 17, 1825; Seven-feet Equatorial.

6th and 8th magnitudes.

Position = 28° 37′ *sf*	5 Obs.	Diff. = 0° 16′
Distance = 3′ 20″.546	5 Obs.	Diff. = 0″.913

At six o'clock in the evening the thermometer stood at 31°; it now stands at 24°. The hoar frost is accumulating rapidly on the polar axis, and on the undefended part of the telescope; but the object-glass, which has not required wiping throughout the night, remains perfectly transparent.

Mean Result.

Position 82° 36′ *sf*; Distance 3′ 20″.304; Epoch 1825.20.

No. DCXIII. R. A. $10^h\ 39^m$; Decl. 14° 41′ S.

STRUVE, 367; P. X. 159;

Double; 8th and 10th magnitudes; small, blue.

Passy; February 23, 1825; Seven-feet Equatorial.

Position = 78° 51′ *nf*	5 Obs.	Diff. 0° 52′	Difficult.
Distance = 31″.399	5 Obs.	Diff. 0″.962	

Passy; March 19, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 79 4′ *nf*	5 Obs.	Diff. = 1° 5′	Very difficult.
Distance = 31″.904	5 Obs.	Diff. = 0″.721	

Stars of low altitude rather obscure, and are very unsteady.

Mean Result.

Position 78° 57′ *nf*; Distance 31″.651; Epoch 1825.17.

No. DCXIV. R. A. $10^h\ 39^m$; Decl. $14°\ 20'$ S.

STRUVE, 368; Hist. Cæl. 331.

Triple; A of the 8th, B $8\frac{1}{2}$, and C of the 6th magnitudes.

Measures of A B.

Blackman-street; April 18, 1824; Five-feet Equatorial.

Position = $72°\ 21'$ *sp*	5 Obs.	Diff. = $1°\ 25'$
Distance = $6''.986$	5 Obs.	Diff. = $0''.821$

Passy; March 19, 1825; Seven-feet Equatorial.

8th and $8\frac{1}{2}$ magnitudes.

Position = $72°\ 32'$ *sp*	5 Obs.	Diff. = $2°\ 21'$
Distance = $7''.538$	5 Obs.	Diff. = $0''.456$

Measures of A C.

Blackman-street; April 18, 1824; Five-feet Equatorial.

8th and 6th magnitudes.

Position = $68°\ 29'$ *sp*	5 Obs.	Diff. = $0°\ 42'$
Distance = $1'\ 18''.216$	5 Obs.	Diff. = $0''.600$

(C being south of A.)

Passy; March 19, 1825; Seven-feet Equatorial.

8th and 7th magnitudes.

Position = $68°\ 59'$ *sp*	5 Obs.	Diff. = $0°\ 53'$
Distance = $1'\ 17''.506$	5 Obs.	Diff. = $1''.010$

(The star C being to the south of A.)

Mean Result.

of A B. Position $72°\ 26'$ *sp*; Distance $7''.262$;

of A C. Position $68°\ 44'$ *sp*; Distance $1'\ 17''.861$;

Epoch 1824.75.

No. DCXV. R. A. $10^h\ 39^m$; Decl. 13° 44′ S.

Nova;

Double; 10th and 11th magnitudes.

Passy; February 24, 1825; Seven-feet Equatorial.

Position = 88° 39′ *np*	5 Obs.	Diff. = 1° 14′	Extremely difficult.
Distance = 1′ 26″.024	6 Obs.	Diff. = 1″.130	

Passy; March 24, 1825; Seven-feet Equatorial.

10th and 11th magnitudes.

Position = 88° 49′ *np*	5 Obs.	Diff. = 0° 45′	Extremely difficult.
Distance = 1′ 26″.143	5 Obs.	Diff. = 0″.625	

Mean Result.

Position 88° 44′ *np* (10 Obs.); Distance 1′ 26″.078 (11 Obs.); Epoch 1825.18.

No. DCXVI. R. A. $10^h\ 43^m$; Decl. 8° 25′ N.

STRUVE, 369; P. X. 179.

Double; 9th and 11th magnitudes.

Blackman-street; April 19, 1824; Seven-feet Equatorial.

Position = 35° 16′ *np*	5 Obs.	Diff. = 2° 58′	Excessively difficult.
Distance = 13″.142	5 Obs.	Diff. = 0″.937	

The night is very bad; I have little confidence in the accuracy of the observations.

Passy; March 26, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 35° 31′ *np*	5 Obs.	Diff. = 2° 18′	Extremely difficult.
Distance = 12″.484	5 Obs.	Diff. = 0″.432	

Passy; March 28, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Distance = 11″.907 | 5 Obs. | Diff. = 1″.202. Excessively difficult.

Passy; March 29, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 35° 17′ *np*	5 Obs.	Diff. = 1° 29′	Extremely difficult.
Distance = 12″.508	5 Obs.	Diff. = 0″.481	

The small star is blue, and bears but the slightest illumination.

Mean Result.

Position 35° 21′ *np* (15 Obs.); Epoch 1824.92;
Distance 12″.510 (20 Obs.); Epoch 1825.00.

No. DCXVII. R. A. $10^h\ 45^m$; Decl. $1^\circ\ 17'$ S.

STRUVE, 370; Hist. Cæl. 227.

Double; 6th and 10th magnitudes; small, decidedly blue, and bears but a feeble illumination.

Blackman-street; March 12, 1824; Five-feet Equatorial.

Position $= 86^\circ\ 57'\ sf$ | 5 Obs. | Diff. $= 0^\circ\ 45'$
Distance $= 35''.113$ | 5 Obs. | Diff. $= 0''.474$ } Difficult.

Blackman-street; April 2, 1824; Five-feet Equatorial.

6th and 10th magnitudes.

Position $= 88^\circ\ 38'\ sf$ | 5 Obs. | Diff. $= 2^\circ\ 25'$
Distance $= 35''.333$ | 5 Obs. | Diff. $= 0''.632$ } Very difficult.

Small star blue, and bears a very indifferent illumination of the micrometer wires.

Mean Result.

Position $87^\circ\ 47'\ sf$; Distance $35''.223$; Epoch 1824.22.

No. DCXVIII. R. A. $10^h\ 47^m$; Decl. $20^\circ\ 9'$ S.

Nova;

Double; 10th and $10\frac{1}{2}$ magnitudes; bear but little illumination.

Passy; March 26, 1825; Seven-feet Equatorial.

Position $= 54^\circ\ 13'\ sp$ | 5 Obs. | Diff. $= 0^\circ\ 46'$
Distance $= 1'\ 18''.061$ | 5 Obs. | Diff. $= 1''.875$ } Extremely difficult.

Passy; March 28, 1825; Seven-feet Equatorial.

10th and 11th magnitudes.

Position $= 54^\circ\ 21'\ sp$ | 5 Obs. | Diff. $= 1^\circ\ 40'$
Distance $= 1'\ 19''.254$ | 5 Obs. | Diff. $= 2''.284$ } Excessively difficult.

Both stars very indistinct.

Passy; March 29, 1825; Seven-feet Equatorial.

10th and 11th magnitudes.

Distance $= 1'\ 19''.989$ | 5 Obs. | Diff. $= 1''.923$. Excessively difficult.

On the admission of the smallest quantity of light, the stars become scarcely visible.

Mean Result.

Position $54^\circ\ 16'\ sp$ (10 Obs.); Distance $1'\ 19''.101$ (15 Obs.); Epoch 1825.28.

No. DCXIX. R. A. $10^h\ 57^m$; Decl. 8° 0′ N.

STRUVE, 375; II. 78.

Double; 8th and 12th magnitudes.

Passy; March 29, 1825; Seven-feet Equatorial.

Position = 72° 38′ *sf*	5 Obs.	Diff. = 4° 8′	Excessively difficult.
Distance = 8″.762	5 Obs.	Diff. = 0″.673	

The small star is of a light blue colour, and cannot be seen except when the night is extremely favourable.

Passy; April 27, 1825; Seven-feet Equatorial.

8th and 11th, or 12th magnitudes.

Position = 75° 11′ *sf*	5 Obs.	Diff. = 1° 38′	Excessively difficult.
Distance = 8″.513	5 Obs.	Diff. = 0″.408	

The small star under the most feeble illumination is visible only with the greatest attention; the measures, I fear, merit but little confidence.

Passy; May 7, 1825; Seven-feet Equatorial.

8th and 12th magnitudes.

Position = 74° 14′ *sf*	5 Obs.	Diff. = 1° 53′.	Excessively difficult.

Mean Result.

Position 74° 1′ *sf*; (15 Obs.); Epoch 1825.30;
Distance 8″.637 (10 Obs.); Epoch 1825.28.

Sir W. HERSCHEL measured this star in 1783 and in 1802, the respective positions being 75° 21′ *sf* and 71° 42′ *sf*. The mean (73° 32′) differs only 0° 29′ from that here stated, so that this star may be presumed liable to no change in position. (H.)

No. DCXX. R. A. $10^h\ 58^m$; Decl. 12° 28′ S.

Nova;

Double; 8th and 10th magnitudes.

Passy; April 19, 1825; Seven-feet Equatorial.

Position = 73° 6′ *nf* | 5 Obs. | Diff. = 0° 30′. Extremely difficult.

The night now so unfavourable, that observations of distance are impracticable.

Passy; April 27, 1825; Seven-feet Equatorial.

8th and 10th, or 11th magnitudes.

Position = 73° 31′ *nf* | 5 Obs. | Diff. = 1° 28′
Distance = 32″.774 | 5 Obs. | Diff. = 0″.553 } Extremely difficult.

Passy; April 29, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 73° 19′ *nf* | 5 Obs. | Diff. = 2° 3′
Distance = 32″.623 | 5 Obs. | Diff. = 0″.408 } Excessively difficult.

Mean Result.

Position 73° 19′ *nf* (15 Obs.); Distance 32″.698 (10 Obs.);
Epoch 1825.31.

No. DCXXI. R. A. $11^h\ 0^m$; Decl. 66° 59′ N.

Struve, 377; 1790.386.

Triple; A 9th, B $9\frac{1}{2}$, and C of the 8th magnitudes.

Measures of A B.

Passy; February 24, 1825; Seven-feet Equatorial.

Position = 64° 35′ *nf* | 5 Obs. | Diff. = 1° 25′
Distance = 43″.327 | 5 Obs. | Diff. = 0″.336 } Rather difficult.

Thermometer stands at 30°; no dew on the object-glass, but the polar axis is very wet.

Passy; February 25, 1825; Seven-feet Equatorial.

9th and $9\frac{1}{2}$ magnitudes.

Position = 64° 26′ *nf* | 5 Obs. | Diff. = 0° 28′
Distance = 43″.534 | 5 Obs. | Diff. = 0″.456 } Difficult.

No. DCXXI. continued.

Measures of A C.

Passy; February 25, 1825; Seven-feet Equatorial.

9th and 8th magnitudes.

Position = 26° 40′ *n p*	3 Obs.	Diff. = 0° 15′	Cloudy.
Distance = 3′ 21″.979	2 Obs.	Diff. = 0″.264	

Night is become bad; no more observations can be gotten.

Passy: March 21, 1825; Seven-feet Equatorial.

9th and 8th magnitudes.

Position = 26° 31′ *n p*	5 Obs.	Diff. = 0° 22′	. . . .
Distance = 3′ 23″.270	5 Obs.	Diff. = 1″.563	

The star C being to the north of A.

Passy; March 26, 1825; Seven-feet Equatorial.

9th and 8th magnitudes.

Distance = 3′ 23″.620	5 Obs.	Diff. = 1″.298.	. . . .

Mean Result.

of A B. Position 64° 30′ *n f*; Distance 4″.431; Epoch 1825.14.
of A C. Position 26° 34′ *n p* (8 Obs.); Epoch 1825.18;
Distance 3′ 23″.201 (12 Obs.); Epoch 1825.19.

No. DCXXII. R. A. 11ʰ 8ᵐ; Decl. 74° 26′ N.

STRUVE, 378; 1790.389.

Double; 9th and 9½ magnitudes, and bear but a very feeble illumination.

Blackman-street; April 11, 1824; Five-feet Equatorial.

Position = 26° 15′ *n p*	5 Obs.	Diff. = 2° 42′	Difficult.
Distance = 12″.551	5 Obs.	Diff. = 1″.168	

Blackman-street; April 12, 1824: Five-feet Equatorial.

8½ and 9½ magnitudes.

Position = 26° 17′ *n p*	5 Obs.	Diff. = 1° 12′	Difficult.
Distance = 12″.408	5 Obs.	Diff. = 1″.358	

Mean Result.

Position 26° 16′ *n p*; Distance 12″.479; Epoch 1824.28.

No. DCXXIII. R. A. $11^h\ 6^m$; Decl. 28° 33′ N.

STRUVE, 379; Hist. Cæl. 61;

Double; $9\frac{1}{2}$ and 10th magnitudes.

Blackman-street; March 13, 1824; Five-feet Equatorial.

Position = 5° 13′ *sf*	5 Obs.	Diff. = 3° 16′	Very difficult.
Distance = 4″.024	5 Obs.	Diff. = 0″.348	

Blackman-street; April 2, 1824; Five-feet Equatorial.

8th and 9th magnitudes.

Position = 5° 14′ *sf*	5 Obs.	Diff. = 2° 10′	Difficult.
Distance = 4″.182	5 Obs.	Diff. = 0″.649	

Night very favourable.

Mean Result.

Position 5° 13′ *nf*; Distance 4″.103; Epoch 1824.22.

No. DCXXIV. R. A. $11^h\ 10^m$; Decl. 0° 40′ S.

STRUVE, 383; Hist. Cæl. 498.

Double; 8th and $8\frac{1}{2}$ magnitudes.

Blackman-street; April 11, 1824; Five-feet Equatorial.

Position = 18° 0′ *sp*	5 Obs.	Diff. = 2° 3′	. . . .
Distance = 10″.011	5 Obs.	Diff. = 0″.442	

Blackman-street; April 12, 1824; Five-feet Equatorial.

8th and $8\frac{1}{2}$ magnitudes.

Position = 18° 3′ *sp*	5 Obs.	Diff. = 1° 13′	. . . .
Distance = 10″.280	5 Obs.	Diff. = 0″.379	

Mean Result.

Position 18° 1′ *sp*; Distance 10″.145; Epoch 1824.27.

No. DCXXV. R. A. $11^h\ 10^m$; Decl. 15° 16′ N.

STRUVE, 382; Hist. Cæl. 223.

Double; 8th and 10th magnitudes.

Blackman-street; April 11, 1824; Five-feet Equatorial.

Position = 79° 33′ *nf*	5 Obs.	Diff. = 2° 37′	Difficult.
Distance = 5″.211	5 Obs.	Diff. = 0″.569	

Blackman-street; April 12, 1824; Five-feet Equatorial.

7th and 8½ magnitudes.

Position = 78° 20′ *nf*	5 Obs.	Diff. = 1° 33′	. . . .
Distance = 4″.362	5 Obs.	Diff. = 0″.474	

Passy; March 26, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 81° 7′ *nf*	5 Obs.	Diff. = 0° 45′	. . . .
Distance = 5″.207	5 Obs.	Diff. = 0″.625	

The distance observed April 12, 1824, does not well accord with either of the sets; at the same time nothing appears in the rough journal to invalidate the accuracy of the former; on the contrary, it would seem that the stars were brighter on that night, than on either of the other nights of observation: the discordant series therefore cannot be rejected with propriety.

Mean Result.

Position 79° 40′ *nf* (15 Obs.); Distance 4″.927 (15 Obs.); Epoch 1824.60.

No. DCXXVI. R. A. $11^h\ 19^m$; Decl. 40° 20′ N.

57 Ursæ Majoris; STRUVE, 388; III. 86.

Double; 8th and 10th magnitudes; small, blue, and bears a very good illumination.

Passy; March 29, 1825; Seven-feet Equatorial.

Position = 80° 5′ *nf*	5 Obs.	Diff. = 0° 51′	. . . .
Distance = 6″.342	5 Obs.	Diff. = 0″.216	

No. DCXXVI. continued.

Passy; April 5, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 79° 26′ *nf* | 5 Obs. | Diff. = 2° 0′
Distance = 6″.246 | 5 Obs. | Diff. = 0″.721

Mean Result.

Position 79° 45′ *nf*; Distance 6″.294; Epoch 1825.25.

In 1783 the position of this star is stated by Sir W. HERSCHEL to have been 75° 36′ *nf*. It will remain to be decided by future measures whether the difference, 4° 9′, between this and the present angle, arise from a real very slow change in the stars themselves, or from error of observation. (H.)

No. DCXXVII. R. A. 11ʰ 21ᵐ; Decl. 16° 26′ S.

Nova;

Double; 8½ and 9th magnitudes.

Passy; March 18, 1825; Seven feet Equatorial.

Position = 60° 12′ *np* | 5 Obs. | Diff. = 0° 17′
Distance = 29″.254 | 5 Obs. | Diff. = 0″.481

Passy; March 26, 1825; Seven-feet Equatorial.

Equal; each of the 8th magnitude.

Position = 61° 11′ *sf* or *np* | 5 Obs. | Diff. = 0° 54′
Distance = 28″.617 | 5 Obs. | Diff. = 0″.625

Passy; March 28, 1825; Seven-feet Equatorial.

Equal; each of the 9th magnitude.

Position = 60° 52′ *np* or *sf* | 4 Obs. | Diff. = 0° 12′.

Night is become cloudy; no more observations can be procured.

Passy; March 29, 1825; Seven-feet Equatorial.

Equal; each of the 8th magnitude.

Position = 60° 46′ *np* or *sf* | 5 Obs. | Diff. = 1° 35′
Distance = 29″.007 | 5 Obs. | Diff. = 1″.010

Mean Result.

Position 60° 45′ *np* or *sf* (19 Obs.); Epoch 1825.25;
Distance 28″.959 (15 Obs.); Epoch 1825.24.

No. DCXXVIII. R. A. $11^h\ 21^m$; Decl. 60° 40′ N.

STRUVE, 389; 1790; 381.

Double; 8th and $8\frac{1}{2}$ magnitudes.

Blackman-street; April 11, 1824; Five-feet Equatorial.

Position = 0° 26′ *sf* | 5 Obs. | Diff. = 2° 13′.

Blackman-street: April 12, 1824; Five-feet Equatorial.

8th and 9th magnitudes.

Position = 0° 18′ *sf* | 5 Obs. | Diff. = 0° 26′
Distance = 13″.053 | 5 Obs. | Diff. = 0″.649

Blackman-street; April 17, 1824; Five feet Equatorial.

8th and 9th magnitudes.

Distance = 13″.028 | 5 Obs. | Diff. = 0″.336.

Mean Result.

Position 0° 22′ *sf*; Distance 13″.040; Epoch 1824.28.

No. DCXXIX. R. A. $11^h\ 28^m$; Decl. 22° 25′ N.

Nova;

Double; 10th and 11th magnitudes.

Passy; May 5, 1825; Seven-feet Equatorial.

Position = 5° 23′ *np* ± | 5 Obs. | Diff. = 1° 28′
Distance = 44″.159 ± | 5 Obs. | Diff. = 3″.775 } Excessively difficult.

Unless these should be corroborated by subsequent observations, I consider them entitled to very little confidence; neither star will bear any illumination.

Passy; May 9, 1825; Seven-feet Equatorial.

10th and 11th magnitudes.

Position = 5° 37′ *np* | 5 Obs. | Diff. = 0° 32′
Distance = 44″.919 | 5 Obs. | Diff. = 0″.841 } Excessively difficult.

Under the most feeble illumination, both stars become invisible.

Passy; May 10, 1825; Seven feet Equatorial.

10th and 12th magnitudes.

Position = 5° 41′ *np* | 5 Obs. | Diff. = 1° 6′
Distance = 44″.044 | 5 Obs. | Diff. = 1″.370 } Excesssively difficult.

Mean Result.

Position 5° 34′ *np* (15 Obs.); Distance 44″.374 (15 Obs.);
Epoch 1825.35.

No. DCXXX. R. A. $11^h\ 30^m$; Decl. 27° 57′ N.

STRUVE, 392; Hist. Cæl. 64;

Double; 11th and 12th magnitudes.

Blackman-street; April 19, 1824; Seven-feet Equatorial.

Position = 3° 56′ *nf*	5 Obs.	Diff. = 1° 38′	Extremely difficult.
Distance = 5″.684	5 Obs.	Diff. = 0″.505	

Under a very slight illumination of the micrometer wires, these stars become invisible.

Passy; March 26, 1825; Seven-feet Equatorial.

11th and 12th magnitudes.

Position = 4° 3′ *nf*	5 Obs.	Diff. = 3° 20′	Extremely difficult.
Distance = 5″.501	5 Obs.	Diff. = 0″.649	

The small star is light blue, and neither of them will bear scarcely any illumination.

Mean Result.

Position 4° 0′ *nf*; Distance 5″.592; Epoch 1824.76.

No. DCXXXI. R. A. $11^h\ 39^m$; Decl. 68° 19′ N.

STRUVE, 395; Hist. Cæl. 385;

Double; 8th and 9th magnitudes.

Blackman-street; April 14, 1824; Five-feet Equatorial.

Position = 89° 4′ *sf*	5 Obs.	Diff. = 1° 35′	. . . . .
Distance = 11″.713	5 Obs.	Diff. = 0″.758	

Blackman-street; April 17, 1824; Five-feet Equatorial.

8th and 9th magnitudes.

Position = 89° 3′ *sf*	5 Obs.	Diff. = 2° 20′	. . . .
Distance = 11″.978	5 Obs.	Diff. = 1″.168	

Mean Result.

Position 89° 4′ *sf*; Distance 11″.845; Epoch 1824.29.

No. D CXXXII. R. A. $11^h\,48^m$; Decl. 9° 48′ N.

STRUVE, 396; IV. 49;

Double; $7\frac{1}{2}$ and 8th magnitudes.

Blackman-street; April 14, 1824; Five-feet Equatorial.

Position = 61° 53′ *sp* | 5 Obs. | Diff. = 0° 51′
Distance = 30″.341 | 5 Obs. | Diff. = 0″.727 . . . .

Blackman-street; April 17, 1824; Five-feet Equatorial.

7th and 9th magnitudes.

Position = 61° 35′ *sp* | 5 Obs. | Diff. = 0° 48′
Distance = 30″.189 | 5 Obs. | Diff. = 0″.885 . . . .

Passy; April 7, 1825; Seven-feet Equatorial.

7th and 9th magnitudes.

Distance = 30″.615 | 5 Obs. | Diff. = 0″.336. . . . .

Observed on the meridian.

Mean Result.

Position 61° 44′ *sp* (10 Obs.); Epoch 1824.29;
Distance 30″.382 (15 Obs.); Epoch 1824.62.

In 1783 the position is stated to have been 56° 30′ *sp*, and the distance 27″.50. An error of observation to the extent of 5° 14′ is too much to be supposed in a star of the 4th class, and it is therefore pretty clear that this star is liable to a slow change; whether arising from orbitual motion in both, or rectilinear in one of the two, future observations must decide. (H.)

No. DCXXXIII. R. A. $11^h\ 56^m$; Decl. $52^\circ\ 55'$ N.

STRUVE, 401; 1790; 376.

Double; 8th and $8\frac{1}{2}$ magnitudes.

Blackman-street; April 14, 1824; Five-feet Equatorial.

Position $= 4^\circ\ 26'$ *s f*	5 Obs.	Diff. $= 2^\circ\ 24'$	. . . .
Distance $= 8''.309$	5 Obs.	Diff. $= 0''.411$	

Blackman-street; April 17, 1824; Five-feet Equatorial.

$8\frac{1}{2}$ and 9th magnitudes.

Position $= 4^\circ\ 25'$ *s f*	5 Obs.	Diff. $= 2^\circ\ 13'$	. . . .
Distance $= 8''.309$	5 Obs.	Diff. $= 0''.695$	

Mean Result.

Position $4^\circ\ 26'$ *s f* Distance $8''.309$; Epoch 1824.29.

No. DCXXXIV. R. A. $12^h\ 2^m$; Decl. $15^\circ\ 48'$ S.

STRUVE, 402; Hist. Cæl. 232.

Double; 8th and 10th magnitudes.

Blackman-street; April 14, 1824; Five-feet Equatorial.

Position $= 7^\circ\ 21'$ *n p*	5 Obs.	Diff. $= 3^\circ\ 0'$	Very difficult.
Distance $= 7''.621$	5 Obs.	Diff. $= 0''.442$	

Blackman-street; April 17, 1824; Five-feet Equatorial.

$8\frac{1}{2}$ and 10th magnitudes.

Position $= 6^\circ\ 45'$ *n p*	5 Obs.	Diff. $= 2^\circ\ 15'$	Difficult.
Distance $= 8''.322$	5 Obs.	Diff. $= 0''.758$	

The small star is blue, and bears but a very feeble illumination.

Mean Result.

Position $7^\circ\ 3'$ *n p*; Distance $7''.971$; Epoch 1824.29.

No. DCXXXV. R. A. $12^h\ 2^m$; Decl. $1°\ 15'$ S.

Nova;

Double; 10th and 11th magnitudes.

Passy; May 5, 1825; Seven-feet Equatorial.

Position $= 6°\ 39'\ np$	5 Obs.	Diff. $= 2°\ 47'$	Extremely difficult.
Distance $= 23''.745$	5 Obs.	Diff. $= 0''.865$	Excessively difficult.

Measures perhaps a little suspicious, although taken with great care. Stars are tolerably steady, but will scarcely bear the slightest illumination.

Passy; May 9, 1825; Seven-feet Equatorial.

10th and 12th magnitudes.

Position $= 7°\ 30'\ np$	5 Obs.	Diff. $= 3°\ 13'$	Excessively difficult.
Distance $= 23''.601$	5 Obs.	Diff. $= 1''.202$	

These results were procured under the most favourable circumstances; the stars were on the meridian, and very steady; yet from the extreme faintness of the smaller star, some inaccuracy may be apprehended.

Mean Result.

Position $7°\ 4'\ np$; Distance $23''.673$; Epoch 1825.34.

No. DCXXXVI. R. A. $12^h\ 6^m$; Decl. $10°\ 58'$ N.

Nova;

Double; $9\frac{1}{2}$ and 10th magnitudes.

Passy; March 7, 1825; Seven-feet Equatorial.

Position $24°\ 29'\ sp$	5 Obs.	Diff. $= 0°\ 20'$.	Very difficult.

Stars very steady; but the night so hazy, that satisfactory measures of distance cannot be obtained.

Passy; March 26, 1825; Seven-feet Equatorial.

10th and 11th magnitudes.

Position $= 24°\ 54'\ sp$	5 Obs.	Diff. $= 1°\ 57'$	Very difficult.
Distance $= 26''.694$	5 Obs.	Diff. $= 1''.851$	Extremely difficult.

Passy; March 29, 1825; Seven-feet Equatorial.

$9\frac{1}{2}$ and 10th magnitudes.

Position $= 24°\ 29'\ sp$	5 Obs.	Diff. $= 0°\ 59'$	Very difficult.
Distance $= 26''.467$	5 Obs.	Diff. $= 0''.432$	Extremely difficult.

Neither star bears a good illumination.

Mean Result.

Position $24°\ 37'\ sp$; Epoch 1825.22; Distance $26''.580$; Epoch 1825.23.

No. DCXXXVII. R. A. $12^h\ 18^m$; Decl. 18° 58′ S.

Nova;

Double; 10th and 12th magnitudes, and bear but the slightest illumination.

Passy; May 5, 1825; Seven-feet Equatorial.

Position = 67° 26′ *sp*	5 Obs.	Diff. = 0° 32′	Extremely difficult.
Distance = 1′ 2″.578	5 Obs.	Diff. = 1″.202	Excessively difficult.

The measure of distance may perhaps be liable to an error of two or three seconds, from the extreme faintness of the small star.

Passy; May 9, 1825; Seven-feet Equatorial.

10th and 12th magnitudes.

Position = 66° 34′ *sp*	5 Obs.	Diff. = 2° 27′	Excessively difficult.
Distance = 1′ 1″.423	5 Obs.	Diff. = 1″.563	

Results probably suspicious; both stars become invisible under an illumination just sufficient to show the situation of the wires.

Passy; May 10, 1825; Seven-feet Equatorial.

10th and 12th magnitudes.

Position = 66° 41′ *sp*	5 Obs.	Diff. = 0° 25′	Excessively difficult.
Distance = 1′ 0″.904	5 Obs.	Diff. = 0″.601	

Observations made with great care; but the obscurity of the stars is such, that coincident measures must not be expected.

Mean Result.

Position 66° 54′ *sp*; Distance 1′ 1″.635; Epoch 1825.35.

No. DCXXXVIII. R. A. $12^h\ 20^m$; Decl. 26° 54′ N.

Nova;

Double; 6th and 7th magnitudes.

Passy; March 26, 1825; Seven-feet Equatorial.

Position = 18° 58′ *sp*	5 Obs.	Diff. = 1° 8′	Tremulous.
Distance = 2′ 24″.501	5 Obs.	Diff. = 0″.913	

Passy; March 29, 1825; Seven-feet Equatorial.

Position = 19° 28′ *sp*	5 Obs.	Diff. = 0° 16′	Unsteady.
Distance = 2′ 24″.372	5 Obs.	Diff. = 1″.202	

Mean Result.

Position 19° 13′ *sp*; Distance 2′ 24″.436; Epoch 1825.23.

No. DCXXXIX. R. A. $12^h\ 29^m$; Decl. 3° 23′ S.

STRUVE, 418; V. 129.

Double; 8th and 13th, or 14th magnitudes.

Passy; May 7, 1825; Seven-feet Equatorial.

Position = 14° 57′ *sf* | 5 Obs. | Diff. = 1° 4′ } Suspicious.
Distance = 49″.618 | 5 Obs. | Diff. = 2″.212 }

The night is very fine, but the measures are excessively difficult; the small star can only be seen with considerable attention.

Passy; May 8, 1825; Seven-feet Equatorial.

8th and 12th, or 14th magnitudes.

Position = 16° 0′ *sf* | 5 Obs. | Diff. = 1° 9′ } Excessively difficult.
Distance = 51″.246 | 5 Obs. | Diff. = 1″.082 }

The small star is so extremely indistinct, that the measures must be considered somewhat dubious. Night favourable.

Passy; May 10, 1825; Seven-feet Equatorial.

8th and 12th, or 13th magnitudes.

Position = 15° 9′ *sf* | 5 Obs. | Diff. = 1° 14′ } Excessively difficult.
Distance = 50″.801 | 5 Obs. | Diff. = 0″.601 }

Night fine, but the small star will scarcely bear any illumination.

Mean Result.

Position 15° 22′ *sf*; Distance 50″.555; Epoch 1825.36.

Sir W. HERSCHEL has no measures of the angle of position of this star. (H.)

No. DCXL. R. A. $12^h\ 29^m$; Decl. $4°\ 22'$ S.

Nova;

Double; 10th and 12th magnitudes; neither star bears but the most feeble illumination.

Passy; May 5, 1825; Seven-feet Equatorial.

Position = $5°\ 32'\ sf$	5 Obs.	Diff. = $6°\ 15'$	Excessively difficult.
Distance = $10''.392$	5 Obs.	Diff. = $1''.202$	

These results must not be regarded with much confidence; the stars become invisible, under almost the slightest illumination.

Passy; May 9, 1825: Seven-feet Equatorial.

11th and 12th magnitudes.

Position = $6°\ 9'\ sf$	5 Obs.	Diff. = $3°\ 35'$	Excessively difficult.
Distance = $10''.002$	5 Obs.	Diff. = $0''.432$	

The distance, in consequence of the indistinctness of each star under illumination must, I fear, be received with distrust.

Mean Result.

Position $5°\ 50'\ sf$; Distance $10''.197$; Epoch 1825.35.

No. DCXLI. R. A. $12^h\ 36^m$; Decl. $15°\ 20'$ N.

Nova;

Double; 8th and $8\frac{1}{2}$ magnitudes.

Passy; April 15, 1825; Seven-feet Equatorial.

Position = $56°\ 44'\ sp$	5 Obs.	Diff. = $0°\ 39'$	Unsteady.
Distance = $33''.267$	5 Obs.	Diff. = $1''.322$	

Passy; April 24, 1825; Seven-feet Equatorial.

8th and $8\frac{1}{2}$ magnitudes.

Position = $56°\ 27'\ sp$	5 Obs.	Diff. = $0°\ 42'$	Steady.
Distance = $33''.452$	5 Obs.	Diff. = $0''.288$	

Mean Result.

Position $56°\ 35'\ sp$; Distance $33''.359$; Epoch 1825.30

No. DCXLII. R. A. $12^h\ 40^m$; Decl. 14° 58′ N.

Nova;

Double; $8\frac{1}{2}$ and 11th magnitudes.

Passy; May 5, 1825; Seven-feet Equatorial.

Position = 53° 50′ *nf*	5 Obs.	Diff. = 2° 12′	Very difficult.
Distance = 54″.306	5 Obs.	Diff. = 1″.923	Extremely difficult.

The small star will scarcely bear the slightest illumination.

Passy; May 7, 1825; Seven-feet Equatorial.

$8\frac{1}{2}$ and 12th magnitudes.

Position = 53° 51′ *nf*	5 Obs.	Diff. = 2° 58′	Excessively difficult.
Distance = 54″.537	5 Obs.	Diff. = 1″.491	

The small star only seen with great attention. Night fine.

Mean Result.

Position 53° 50′ *nf*; Distance 54″.421; Epoch 1825.34.

No. DCXLIII. R. A. $12^h\ 44^m$; Decl. 17° 4′ S.

Nova;

Double; 8th and 9th magnitudes.

Passy; March 26, 1825; Seven-feet Equatorial.

Position = 25° 26′ *np*	5 Obs.	Diff. = 1° 1′	On the meridian, but
Distance = 23″.433	5 Obs.	Diff. = 1″.154	very tremulous.

Passy; March 29, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 25° 0′ *np*	5 Obs.	Diff. = 0° 44′	Unsteady.
Distance = 23″.910	5 Obs.	Diff. = 0″.721	

Passy; April 11, 1825; Seven-feet Equatorial.

8th and 10th magnitudes; small, blue.

Position = 25° 5′ *np*	5 Obs.	Diff. = 1° 20′	Very difficult.
Distance = 23″.228	5 Obs.	Diff. = 1″.082	Extremely difficult.

The small star is very obscure, and bears but a very feeble illumination.

Passy; April 12, 1825; Seven-feet Equatorial.

8th and 10th magnitudes; the small star is very faint.

Position = 24° 46′ *np*	5 Obs.	Diff. = 2° 11′	Extremely difficult.
Distance = 23″.467	5 Obs.	Diff. = 0″.913	Excessively difficult.

Mean Result.

Position 25° 4′ *np* (20 Obs.); Distance 23″.509 (20 Obs.); Epoch 1825.26.

No. DCXLIV. R. A. $12^h\ 51^m$; Decl. 15° 18′ N.

Nova;

Double; 9th and 11th magnitudes.

Passy; May 5, 1825; Seven-feet Equatorial.

Position = 81° 22′ *sp*	5 Obs.	Diff. = 1° 9′	Very difficult.
Distance = 27″.208	5 Obs.	Diff. = 2″.164	Extremely difficult.

Results perhaps a little suspicious; the larger star bears but a feeble, and the smaller scarcely any illumination.

Passy; May 7, 1825; Seven-feet Equatorial.

9th and 12th magnitudes.

Position = 80° 56′ *sp*	5 Obs.	Diff. = 1° 42′	Extremely difficult.
Distance = 27″.111	5 Obs.	Diff. = 1″.491	Excessively difficult.

Observed when on the meridian. Night fine.

Mean Result.

Position 81° 9′ *sp*; Distance 27″.159; Epoch 1825.34.

No. DCXLV. R. A. $12^h\ 58^m$; Decl. 1° 35′ N.

Nova;

Double; 8th and 8½ magnitudes.

Passy; April 12, 1825; Seven-feet Equatorial.

Position = 85° 0′ *nf*	5 Obs.	Diff. = 0° 58′	Very steady and
Distance = 8″.213	5 Obs.	Diff. = 0″.817	well defined.

Passy; April 15, 1825; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 84° 36′ *nf*	5 Obs.	Diff. = 2° 5′	Occasionally well defined,
Distance = 7″.983	5 Obs.	Diff. = 0″.793	but very unsteady.

Variable refraction so extremely troublesome, that I am compelled to relinquish observing.

Mean Result.

Position 84° 48′ *nf*; Distance 8″.098; Epoch 1825.28.

No. DCXLVI. R. A. $13^h\ 1^m$; Decl. 16° 25′ N.

Nova;

Double; 9th and 10th magnitudes.

Passy; May 5, 1825; Seven-feet Equatorial.

Position = 70° 48′ *n p* | 5 Obs. | Diff. = 3° 50′ } Very difficult.
Distance = 3″.905 | 5 Obs. | Diff. = 0″.481 } Extremely difficult.

The smaller star will scarcely bear any illumination.

Passy; May 9, 1825; Seven-feet Equatorial.

8½ and 11th magnitudes.

Position = 74° 44′ *n p* | 5 Obs. | Diff. = 2° 30′ } Excessively difficult.
Distance = 4″.221 | 5 Obs. | Diff. = 0″.962 }

Observed on the meridian; distances considered a little doubtful. The night is become so unfavourable, that the small star is seen only with great difficulty.

Passy; May 10, 1825; Seven-feet Equatorial.

9th and 10th magnitudes

Position = 73° 38′ *n p* | 5 Obs. | Diff. = 0° 35′ } Very difficult.
Distance = 4″.145 | 5 Obs. | Diff. = 0″.408 }

Observed when on the meridian; but the small star does not admit of a good illumination of the wires.

Passy; May 14, 1825; Seven-feet Equatorial.

9th and 11th magnitudes.

Position = 71° 54′ *n p* | 5 Obs. | Diff. = 1° 50′. Excessively difficult.

The small star only visible by glimpses, and then very indistinctly; the observations by no means satisfactory.

Mean Result.

Position 72° 46′ *n p* (20 Obs.); Epoch 1825.38;

Distance 4″.090 (15 Obs.); Epoch 1825.37.

No. DCXLVII. R. A. $13^h\ 1^m$; Decl. $1^\circ\ 43'$ S.

Nova;

Double; 8th and 13th magnitudes.

Passy; May 7, 1825; Seven-feet Equatorial.

Position $= 56^\circ\ 36'\ sp$ | 5 Obs. | Diff. $= 1^\circ\ 15'$
Distance $= 42''.582$ | 5 Obs. | Diff. $= 1''.394$ } Excessively difficult.

The night is very fine; but the small star is so obscure, that I fear much reliance must not be placed in the results.

Passy; May 14, 1825; Seven-feet Equatorial.

Position $= 55^\circ\ 42'\ sp$ | 5 Obs. | Diff. $= 1^\circ\ 3'$
Distance $= 43''.676$ | 5 Obs. | Diff. $= 1''.130$ } Excessively difficult.

Stars of the 8th and 13th, or 14th magnitudes: the smaller one scarcely bears the least illumination. Observed on the meridian. Night fine.

Mean Result.

Position $56^\circ\ 9'\ sp$; Distance $43''.129$; Epoch 1825.36.

No. DCXLVIII. R. A. $13^h\ 5^m$; Decl. $19^\circ\ 0'$ N.

Nova;

Double; 10th and 12th, or 13th magnitudes. If this star be brought into the upper part of the field, a nebula of considerable magnitude will be found in the lower part of it.

Passy; May 10, 1825; Seven-feet Equatorial.

Position $= 25^\circ\ 55'\ nf$ | 4 Obs. | Diff. $= 0^\circ\ 34'$
Distance $= 1'\ 27''.847 \pm$ | 2 Obs. | Diff. $= 1''.875$ } Excessively difficult.

These stars are so extremely faint, that measures of accuracy cannot be obtained. Night fine.

Passy; May 14, 1825; Seven-feet Equatorial.

10th and 13th magnitudes.

Position $= 25^\circ\ 3'\ nf$ | 4 Obs. | Diff. $= 1^\circ\ 20'$
Distance $= 1'\ 32''.175 \pm$ | 2 Obs. | Diff. $= 2''.284$ } Excessively difficult.

The small star is so extremely indistinct, that the measures are very unsatisfactory; those of distance are to be regarded as mere approximations.

No. DCXLVIII. continued.

Passy; May 31, 1825; Seven-feet Equatorial.

10th and 14th, or 15th magnitudes.

Position = 25° 7′ *nf*	4 Obs.	Diff. = 1° 34′	Excessively difficult.
Distance = 1′ 26″.888 ±	2 Obs.	Diff. = 0″.649 ±	

Night fine, but observations very liable to error, in consequence of the extreme faintness of the stars.

Mean Result.

Position 25° 22′ *nf*; Distance 1′ 28″.970; Epoch 1825.38.

No. DCXLIX. R. A. 13^h 22^m; Decl. 60° 53′ N.

γ 426 (BODE) Ursæ Majoris; STRUVE, 440; VI. 22.

Double; 6th and 9th magnitudes.

Blackman-street; April 17, 1824; Five-feet Equatorial.

Position = 20° 57′ *sf*	5 Obs.	Diff. = 0° 22′	. . . .
Distance = 3′ 1″.373	5 Obs.	Diff. = 1″.263	

Blackman-street; April 18, 1824; Five-feet Equatorial.

6th and 9th magnitudes.

Position = 21° 6′ *sf*	5 Obs.	Diff. = 0° 41′	. . . .
Distance = 3′ 1″.617	5 Obs.	Diff. = 1″.263	

Mean Result.

Position 21° 2′ *sf*; Distance 3′ 1″.495; Epoch 1824.30.

Sir W. HERSCHEL has no measures of this star. (H.)

No. DCL. R. A. $13^h\ 25^m$; Decl. 12° 33′ S.

Nova;

Double; $8\frac{1}{2}$ and 11th magnitudes.

Passy; May 5, 1825; Seven-feet Equatorial.

Position = 59° 11′ *sf*	5 Obs.	Diff. = 1° 26′	Very difficult.
Distance = 45″.852	5 Obs.	Diff. = 0″.240	Extremely difficult.

The small star becomes invisible under a very slight illumination.

Passy; May 10, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 59° 8′ *sf*	5 Obs.	Diff. = 0° 33′	Very difficult.
Distance = 45″.197	5 Obs.	Diff. = 0″.889	

Observed when on the meridian, but the small star is very faint.

Mean Result.

Position 59° 10′ *sf*; Distance 45″.524; Epoch 1825.35.

No. DCLI. R. A. $13^h\ 27^m$; Decl. 25° 35′ S.

Nova;

Double; 8th and $8\frac{1}{2}$ magnitudes.

Passy; May 5, 1825; Seven-feet Equatorial.

Position = 77° 2′ *sp*	5 Obs.	Diff. = 2° 8′	Unsteady.
Distance = 10″.363	5 Obs.	Diff. = 1″.400	

Within a few minutes of the meridian, when observed.

Passy; May 8, 1825; Seven-feet Equatorial.

8th and $8\frac{1}{2}$ magnitudes.

Position = 77° 59′ *sp*	5 Obs.	Diff. = 1° 21′	Tolerably steady.
Distance = 10″.337	5 Obs.	Diff. = 0″.408	

Observed on the meridian. Night fine.

Mean Result.

Position 77° 30′ *sp*; Distance 10″.350; Epoch 1825.34.

No. DCLII. R. A. $13^h\ 36^m$; Decl. $9^\circ\ 40'$ S.

Nova;

Double; 9th and $9\frac{1}{2}$ magnitudes; the smaller star does not bear a very good illumination.

Passy; May 7, 1825; Seven-feet Equatorial.

Position $= 57^\circ\ 21'\ sf$	5 Obs.	Diff. $= 1^\circ\ 18'$	Difficult.
Distance $= 53''.643$	5 Obs.	Diff. $= 0''.913$	

Observed on the meridian. Night very favourable.

Passy; May 10, 1825; Seven-feet Equatorial.

9th and $9\frac{1}{2}$ magnitudes.

Position $= 56^\circ\ 19'\ sf$	5 Obs.	Diff. $= 1^\circ\ 2'$	. . . .
Distance $= 54''.095$	5 Obs.	Diff. $= 0''.865$	

Mean Result.

Position $56^\circ\ 50'\ sf$; Distance $53''.869$; Epoch 1825.35.

No. DCLIII. R. A. $13^h\ 38^m$; Decl. $19^\circ\ 18'$ N.

Nova;

Double; 8th and 11th magnitudes: the small star scarcely bears any illumination.

Passy; May 7, 1825; Seven-feet Equatorial.

Position $= 83^\circ\ 0'\ sp$	5 Obs.	Diff. $= 0^\circ\ 54'$	Extremely difficult.
Distance $= 30''.257$	5 Obs.	Diff. $= 0''.432$	

Observed when 15 minutes east of the meridian. Night favourable.

Passy; May 14, 1825; Seven-feet Equatorial.

8th and 12th magnitudes.

Position $= 82^\circ\ 50'\ sp$	5 Obs.	Diff. $= 1^\circ\ 50'$	Excessively difficult.
Distance $= 30''.778$	5 Obs.	Diff. $= 0''.360$	

Night fine, but the small star bears only the most scanty illumination.

Mean Result.

Position $82^\circ\ 55'\ sp$; Distance $30''.517$; Epoch 1825.36.

No. DCLIV. R. A. $13^h\ 40^m$; Decl. 39° 25′ N.

Nova;

Double; 8th and 11th magnitudes.

Passy; April 29, 1825; Seven-feet Equatorial.

Position = 32° 29′ *sp*	5 Obs.	Diff. = 0° 48′	Very difficult.
Distance = 1′ 10″.599	5 Obs.	Diff. = 0″.962	Extremely difficult.

The small star scarcely bears the slightest illumination.

Passy; May 27, 1825; Seven-feet Equatorial.

7th and 11th magnitudes.

Position = 31° 57′ *sp*	5 Obs.	Diff. = 0° 20′	Very difficult.
Distance = 1′ 11″.089	5 Obs.	Diff. = 1″.491	

Mean Result.

Position 32° 13′ *sp*; Distance 1′ 10″.844; Epoch 1825.36.

No. DCLV. R. A. $13^h\ 42^m$; Decl. 18° 35′ N.

Nova;

Double; 9th and 11th magnitudes.

Passy; May 8, 1825; Seven-feet Equatorial.

Position = 13° 59′ *nf*	5 Obs.	Diff. = 1° 38′	Extremely difficult.
Distance = 35″.448	5 Obs.	Diff. = 2″.043	

Observed on the meridian. Night fine, but the small star is very faint.

Passy; May 27, 1825; Seven-feet Equatorial.

8th and 12th magnitudes.

Position = 14° 1′ *nf*	5 Obs.	Diff. = 1° 40′	Extremely difficult.
Distance = 34″.661	5 Obs.	Diff. = 0″.913	

Mean Result.

Position 14° 0′ *nf*; Distance 35″.054; Epoch 1825.37.

No. DCLVI. R. A. $13^h\ 42^m$; Decl. 22° 12′ N.

Nova;

Double; 7th and 8th magnitudes.

Passy; March 7, 1825; Seven-feet Equatorial.

Position = 62° 0′ *sp*	5 Obs.	Diff. = 0° 41′	Very steady.
Distance = 1′ 25″.599	5 Obs.	Diff. = 0″.505	

Observed when 2^h 40′ east of the meridian.

Passy; March 26, 1825; Seven-feet Equatorial.

7th and 8th magnitudes.

Position = 61° 41′ *sp*	5 Obs.	Diff. = 1° 0′	Unsteady.
Distance = 1′ 26″.467	5 Obs.	Diff. = 1″.130	

Mean Result.

Position 61° 50′ *sp* (10 Obs.); Distance 1′ 26″.033 (10 Obs.); Epoch 1825.20.

No. DCLVII. R. A. $13^h\ 46^m$; Decl. 7° 12′ S.

Nova;

Double; $8\frac{1}{2}$ and 9th magnitudes: the small star bears a tolerable illumination.

Passy; May 5, 1825; Seven-feet Equatorial.

Position = 39° 4′ *nf*	5 Obs.	Diff. = 3° 5′	Rather difficult.
Distance = 2″.529	5 Obs.	Diff. = 0″.481	Difficult.

Observed when on the meridian. Stars tolerably well defined, but unsteady. I tried to use a higher power than 181, but could not do it advantageously.

Passy; May 10, 1825; Seven-feet Equatorial.

$8\frac{1}{2}$ and $9\frac{1}{2}$ magnitudes.

Position = 37° 29′ *nf*	5 Obs.	Diff. 2° 36′	Difficult.
Distance = 2″.928	5 Obs.	Diff. 0″.240	

A magnifying power of 181 is insufficient to separate distinctly these stars from each other; but under a higher power they become pale and ill defined.

Passy; June 21, 1825; Seven-feet Equatorial.

9th and $9\frac{1}{2}$ magnitudes.

Distance = 2″.639 | 5 Obs. | Diff. = 0″.336. Very difficult.

Observed when 50 minutes west of the meridian. Night fine.

Mean Result.

Position 38° 16′ *nf*; Epoch 1825.35; Distance 2″.699; Epoch 1825.39.

No. DCLVIII. R. A. $13^h\ 51^m$; Decl. 26° 41′ N.

STRUVE, 449; Hist. Cæl. 335;

Double; 9th and 10th magnitudes; small star decidedly blue.

Blackman-street; April 18, 1824; Five-feet Equatorial.

Position = 29° 12′ *s p* | 5 Obs. | Diff. = 1° 9′
Distance = 4″.737 | 5 Obs. | Diff. = 0″.632 } Difficult.

Blackman-street; April 19, 1824; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 28° 32′ *s p* | 5 Obs. | Diff. = 1° 13′
Distance = 5″.295 | 5 Obs. | Diff. = 0″.889 } Difficult.

Mean Result.

Position 28° 52′ *s p*; Distance 5″.016; Epoch 1824.30.

No. DCLIX. R. A. $13^h\ 56^m$; Decl. 17° 19′ S.

STRUVE, 451; Hist. Cæl. 233;

Double; 9th and 11th, or 12th magnitudes.

Passy; June 1, 1825; Seven-feet Equatorial.

Position = 79° 10′ *s f* | 5 Obs. | Diff. = 1° 4′
Distance = 32″.625 | 5 Obs. | Diff. = 1″.875 } Excessively difficult.

Observed when on the meridian, but small star very indistinct.

Passy; June 9, 1825; Seven-feet Equatorial.

9th and 11th magnitudes.

Position = 79° 44′ *s f* | 5 Obs. | Diff. = 1° 28′
Distance = 31″.577 | 5 Obs. | Diff. = 0″.937 } Night very favourable.

Measures *not* excessively difficult. Stars steady.

Passy; June 12, 1825; Seven-feet Equatorial.

9th and 12th magnitudes.

Distance = 31″.889 | 5 Obs. | Diff. = 1″.082. Excessively difficult.

Mean Result.

Position 79° 27′ *s f*; Epoch 1825.43; Distance 32″.031; Epoch 1825.44.

No. DCLX. R.A. 14^h 0′; Decl. 22° 3′ N.

Nova;

Double; $8\frac{1}{2}$ and 10th magnitudes: large, white; small, blue.

Passy; May 5, 1825; Seven-feet Equatorial.

Position = 69° 9′ *nf*	5 Obs.	Diff. = 3° 35′	Difficult.
Distance = 4″.741	5 Obs.	Diff. = 0″.360	Very difficult.

Observed when on the meridian; the small star does not bear a good illumination.

Passy; May 10, 1825; Seven-feet Equatorial.

$8\frac{1}{2}$ and 10th magnitudes.

Position = 70° 17′ *nf*	5 Obs.	Diff. = 3° 34′	Very difficult.
Distance = 5″.035	5 Obs.	Diff. = 0″.481	

The small star is blue, and bears but the most feeble illumination.

Mean Result.

Position 69° 43′ *nf*; Distance 4″.888; Epoch 1825.35.

No. DCLXI. R.A. 14^h 1^m; Decl. 2° 30′ S.

Nova;

Double; 9th and $9\frac{1}{2}$ magnitudes.

Passy; May 5, 1825; Seven-feet Equatorial.

Position = 62° 23′ *nf*	5 Obs.	Diff. = 1° 2′	A few minutes west
Distance = 7″.988	5 Obs.	Diff. = 0″.384	of the meridian.

Passy; May 9, 1825; Seven-feet Equatorial.

$9\frac{1}{2}$ and 10th magnitudes.

Position = 63° 20′ *nf*	5 Obs.	Diff. = 1° 15′	Difficult.
Distance = 7″.886	5 Obs.	Diff. = 0″.408	Very difficult.

Mean Result.

Position 62° 51′ *nf*; Distance 7″.937; Epoch 1825.35.

No. DCLXII. R. A. $14^h\ 8^m$; Decl. 29° 35′ N.

Nova;

Double; 8th and 12th magnitudes.

Passy; May 7, 1825; Seven-feet Equatorial.

Position = 18° 17′ *sf* | 5 Obs. | Diff. = 3° 2′ } Excessively difficult.
Distance = 13″.349 | 5 Obs. | Diff. = 1″.250 }

Observed on the meridian. Night fine; but the small star is extremely faint, and scarcely bears any illumination.

Passy; May 10, 1825; Seven-feet Equatorial.

8th and 12th magnitudes.

Position 16° 48′ *sf* | 5 Obs. | Diff. = 0° 22′ } Excessively difficult.
Distance 14″.446 | 5 Obs. | Diff. = 1″.130 }

Small star is blue, and allows only the most feeble illumination.

Passy; June 1, 1825; Seven-feet Equatorial.

8th and 12th magnitudes.

Distance = 13″.607 | 5 Obs. | Diff. = 0″.962. Excessively difficult.

Mean Result.

Position 17° 32′ *sf*; Epoch 1825.35; Distance 13″.801; Epoch 1825.37.

No. DCLXIII. R. A. $14^h\ 40^m$; Decl. 29° 30′ S.

Nova;

Double; 8th and 10th magnitudes; small, blue.

Passy; May 5, 1825; Seven-feet Equatorial.

Position = 51° 14′ *sp* | 5 Obs. | Diff. = 1° 28′ } Difficult.
Distance = 56″.624 | 5 Obs. | Diff. = 0″.481 }

Observed when 10 minutes east of the meridian.

Passy; May 9, 1825; Seven-feet Equatorial.

7th and 10th magnitudes.

Position = 50° 33′ *sp* | 5 Obs. | Diff. = 0° 58′ } Difficult.
Distance = 56″.769 | 5 Obs. | Diff. = 0″.408 } Very difficult.

Observed on the meridian; but stars not steady.

Mean Result.

Position 50″ 53′ *sp*; Distance 56″.696; Epoch 1825.35.

No. DCLXIV. R. A. $14^h\ 53^m$; Decl. 16° 29′ N.

Nova;

Double; 9th and $9\frac{1}{2}$ magnitudes.

Passy; May 5, 1825; Seven-feet Equatorial.

Position = 84° 9′ *sp*	5 Obs.	Diff. = 0° 58′	Satisfactory.
Distance = 25″.756	5 Obs.	Diff. = 0″.817	

Measures easy; each star bears a tolerable illumination.

Passy; May 9, 1825; Seven-feet Equatorial.

$9\frac{1}{2}$ and 10th magnitudes.

Position = 83° 56′ *sp*	5 Obs.	Diff. = 1° 12′	Difficult.
Distance = 25.″919	5 Obs.	Diff. = 0″.432	

Mean Result.

Position 84° 2′ *sp*; Distance 25″.837; Epoch 1825.35.

No. DCLXV. R. A. $14^h\ 55^m$; Decl. 17° 13′ S.

Nova;

Double; $8\frac{1}{2}$ and 10th magnitudes.

Passy; April 3, 1825; Seven-feet Equatorial.

Position = 2° 9′ *sf*	5 Obs.	Diff. = 1° 15′	Difficult.
Distance = 24″.715	5 Obs.	Diff. = 0″.553	Very difficult.

Passy; May 10, 1825; Seven-feet Equatorial.

$8\frac{1}{2}$ and 11th magnitudes.

Position = 1° 35′ *sf*	5 Obs.	Diff. = 0° 35′	Very difficult.
Distance = 25″.428	5 Obs.	Diff. = 0″.866	

Observed on the meridian. Night fine.

Passy; June 10, 1825; Seven-feet Equatorial.

$8\frac{1}{2}$ and 10th magnitudes.

Position = 1° 49′ *sf*	5 Obs.	Diff. = 1° 9′	Difficult.
Distance = 25″.667	5 Obs.	Diff. = 1″.270	Very difficult.

Observed on the meridian: the small star bears but a very feeble illumination.

Mean Result.

Position 1° 51′ *sf*; Distance 25″.270; Epoch 1825.35.

No. DCLXVI. R. A. $14^h\ 56^m$; Decl. $75°\ 36'$ N.

33 (Bode) Ursæ Minoris; South's Catalogue.

Double; 6th and 9th magnitudes.

Blackman-street; June 8, 1824; Five-feet Equatorial.

Position = 52° 6′ *nf*	5 Obs.	Diff. = 0° 19′	. . . .
Distance = 2′ 53″.259	5 Obs.	Diff. = 1″.322	

Passy; June 12, 1825; Seven-feet Equatorial.

6th and 9th magnitudes.

Position = 52° 0′ *nf*	5 Obs.	Diff. = 0° 20′	Unsteady.
Distance = 2′ 53″.103	5 Obs.	Diff. = 0″.841	

Mean Result.

Position 52° 3′ *nf*; Distance 2′ 53″.180; Epoch 1824.94.

No. DCLXVII. R. A. $15^h\ 3^m$; Decl. 4° 55′ S.

Nova;

Double; 9th and 13th magnitudes.

Passy; May 10, 1825; Seven-feet Equatorial.

Position = 65° 39′ *np*	5 Obs.	Diff. = 0° 42′	Excessively difficult.
Distance = 31″.175	5 Obs.	Diff. = 1″.322	

The small star bears only the slightest illumination; and unless the weather is very favourable, it cannot be seen even in the unilluminated field of view of this instrument, with a power of 181. Observed with 92.

Passy; June 9, 1825; Seven-feet Equatorial.

9th and 12th, or 13th magnitudes.

Position = 65° 39′ *np*	5 Obs.	Diff. = 1° 45′	Excessively difficult.
Distance = 32″.188	5 Obs.	Diff. = 0″.841	

Night fine; but the small star scarcely bears the least illumination.

Observations made with 92.

Mean Result.

Position 65° 39′ *np*; Distance 31″.181; Epoch 1825.39.

No. DCLXVIII. R. A. $15^h\ 4^m$; Decl. 39° 38′ N.

Nova;

Double; 9th and 13th, or 15th magnitudes.

Passy; June 9, 1825; Seven-feet Equatorial.

Position = 64° 56′ *n p*	5 Obs.	Diff. = 2° 58′	Excessively difficult.
Distance = 10″.615	6 Obs.	Diff. = 1″.130	

Night remarkably fine; yet the small star is so extremely obscure, that the results may be a little erroneous.

Passy; June 10, 1825; Seven-feet Equatorial.

9th and 15th magnitudes.

Position = 59° 15′ *n p*	5 Obs.	Diff. = 3° 55′	Excessively difficult.
Distance = 10″.866	5 Obs.	Diff. = 0″.601	

The small star is light blue, and bears scarcely the least illumination; the measures must be regarded with suspicion.

Passy; June 12, 1825; Seven-feet Equatorial.

9th and 14th, or 15th magnitudes.

Position = 63° 3′ *n p*	5 Obs.	Diff. = 3° 55′	Excessively difficult.
Position = 63° 30′ *n p*	5 Obs.	Diff. = 4° 25′	

The first set was gotten with a power of 92; the second with 157. The small star is light blue, and with 181, (the commonly used eye-piece,) it could scarcely be distinguished. Observed when on the meridian. Night very favourable.

Mean Result.

Position 63° 50′ *n p*; Distance 10″.740; Epoch 1825.44.

In taking the mean, the position observed on June 10, is excluded.

No. DCLXIX. R. A. $15^h\ 5^m$; Decl. 15° 5′ N.

Nova;

Double; 10th and 13th, or 15th magnitudes.

Passy; June 9, 1825; Seven-feet Equatorial.

Position = 74° 30′ *nf*	7 Obs.	Diff. = 6° 33′	Very doubtful.
Distance = 6″.297	5 Obs.	Diff. = 0″.577	

These stars will bear neither illumination nor magnifying power. With 181 nothing could be obtained worth transcribing; and 157 was tried unsuccessfully. The observations were made with 92, the lowest power I have; and were attended with such extreme difficulty, that I regard them as little else n approximations. The stars on the meridian when observed, and the night unusually fine.

Passy; June 10, 1825; Seven-feet Equatorial.

10th and 15th magnitudes.

Position = 71° 46′ *nf*	7 Obs.	Diff. = 3° 15′	Excessively difficult.
Distance = 5″.817	5 Obs.	Diff. = 0″.601	

The stars are so extremely pale, that a higher power than 92 cannot be used: the results are very suspicious: I have no confidence in their accuracy. The night is remarkably favourable for difficult observations.

Mean Result.

Position 78° 8′ *nf*; Distance 6″.057; Epoch 1825.44.

No. DCLXX. R. A. $15^h\ 10^m$; Decl. 2° 28′ N.

5 Serpentis; STRUVÉ, 480; III. 106.

Double; 7th and 15th magnitudes.

Passy; June 9, 1825; Seven-feet Equatorial.

Position = 51° 17′ *nf*	5 Obs.	Diff. = 2° 3′	Extremely difficult.
Distance = 10″.680	5 Obs.	Diff. = 0″.721	Excessively difficult.

Observed when on the meridian with a power of 92; with 181 and 157 I could not see the small star, which bears so very feeble an illumination, that the accuracy of the results is perhaps a little questionable.

No. DCLXX. continued.

Passy; June 14, 1825; Seven-feet Equatorial.

6th and 15th, or 20th magnitudes.

Position = 49° 45′ *nf* | 2 Obs. | Diff. = 3° 29′. Excessively difficult.

The small star will not bear the slightest illumination. No measures of distance can be procured, and these of position are little else than approximations.

Passy; June 17, 1825; Seven-feet Equatorial.

6th and 15th magnitudes.

Position = 51° 6′ *nf* | 5 Obs. | Diff. = 2° 20′ } Excessively difficult.
Distance = 10″.716 | 5 Obs. | Diff. = 0″.601 }

Observed on the meridian. Night fine; but the small star will bear only the most feeble illumination.

Mean Result.

Position 50° 57′ *nf*; Distance 10″.698; Epoch 1825.45.

Sir W. HERSCHEL has no measures of this star. (H.)

No. DCLXXI. R. A. 15^h 18^m; Decl. 10° 20′ S.

Nova;

Double; 9th and 11th magnitudes.

Passy; May 27, 1825; Seven-feet Equatorial.

Position = 43° 15′ *sf* | 5 Obs. | Diff. = 2° 0′ } Extremely difficult.
Distance = 9″.487 | 5 Obs. | Diff. = 0″.962 } Excessively difficult.

The small star will not bear a good illumination. Night fine.

Passy; May 31, 1825; Seven-feet Equatorial.

9th and 13th magnitudes.

Position = 42° 14′ *sf* | 5 Obs. | Diff. = 2° 23′ } Excessively difficult.
Distance = 9″.659 | 4 Obs. | Diff. = 0″.913 }

From the extreme faintness of the small star, great reliance must not be placed in the accuracy of these measures. Night tolerably good.

Mean Result.

Position 42° 44′ *sf*; Distance 9″.573; Epoch 1825.41.

No. DCLXXII. R. A. $15^h\ 22^m$; Decl. 19° 35′ S.

Nova;

Double; 8th and 10th magnitudes.

Passy; May 9, 1825; Seven-feet Equatorial.

Position = 13° 39′ *np*	5 Obs.	Diff. = 0° 43′	Difficult.
Distance = 11″.199	5 Obs.	Diff. = 0″.432	

The small star is decidedly light blue, and is rendered more distinct by slight illumination. Observed on the meridian.

Passy; May 10, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 12° 50′ *np*	5 Obs.	Diff. = 1° 45′	Very difficult.
Distance = 11″.738	5 Obs.	Diff. = 1″.322	

Stars on the meridian when observed; the smaller is blue, and bears but a feeble illumination. Night fine.

Mean Result.

Position 13° 14′ *np*; Distance 11″.468; Epoch 1825.35.

No. DCLXXIII. R. A. $15^h\ 23^m$; Decl. 28° 52′ S.

Nova;

Double; equal, each 8½ magnitude.

Passy; May 7, 1825; Seven-feet Equatorial.

Position = 27° 14′ *np* or *sf*	5 Obs.	Diff. = 1° 6′	. . . .
Distance = 9″.166	5 Obs.	Diff. = 0″.481	

Observed when a few minutes east of the meridian. Measures satisfactory. Night very favourable.

Passy; May 24, 1825; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 27° 34′ *np*	5 Obs.	Diff. = 1° 57′	Difficult.
Distance = 9″.190	5 Obs.	Diff. = 0″.745	

Observed on the meridian, but night unfavourable.

Mean Result.

Position 27° 44′ *np* or *sf*; Distance 9″.178; Epoch 1825.37.

No. DCLXXIV. R. A. $15^h\ 32^m$; Decl. 36° 54′ N.

Nova;

Double; 8th and $8\frac{1}{4}$ magnitudes.

Passy; May 7, 1825; Seven-feet Equatorial.

Position = 4° 55′ *s p*	5 Obs.	Diff. = 1° 20′	Steady and well defined.
Distance = 15″.855	5 Obs.	Diff. = 0″.408	

A few minutes west of the meridian when observed.

Passy; May 24, 1825; Seven-feet Equatorial.

$8\frac{1}{4}$ and $8\frac{1}{2}$ magnitudes.

Position = 5° 6′ *s p*	5 Obs.	Diff. = 0° 26′	Satisfactory.
Distance = 15″.441	5 Obs.	Diff. = 0″.336	

Observed on the meridian. Stars tolerably steady.

Mean Result.

Position 5° 0′ *s p*; Distance 15″.648; Epoch 1825.37.

No. DCLXXV. R. A. $15^h\ 51'$; Decl. 22° 16′ N.

Nova;

Triple; A of the 9th, B of the 10th, and C of the 8th magnitudes.

Measures of A B.

Blackman-street; July 8, 1824; Seven-feet Equatorial.

Position = 62° 49′ *s p*	5 Obs.	Diff. = 1° 15′	Very difficult.
Distance = 5″.352	5 Obs.	Diff. = 0″.432	Extremely difficult.

The small star bears but the most feeble illumination. Observed when 45 minutes west of the meridian.

Passy; June 10, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 60° 44′ *s p*	5 Obs.	Diff. = 2° 32′	Very difficult.
Distance = 4″.821	5 Obs.	Diff. = 0″.529	

Observed on the meridian. Night fine; but neither star bears a good illumination.

Mean Result.

Position 61° 46′ *s p*; Distance 5″.086; Epoch 1824.98.

No. DCLXXV. continued.

Measures of A C.

Blackman-street; June 8, 1824; Five-feet Equatorial.

Position = 33° 45′ *sp* | 5 Obs. | Diff. = 1° 15′. Difficult.

(C being to the *south* of A.)

Observed on the meridian; but night very bad.

Blackman-street; July 8, 1824; Seven-feet Equatorial.

9th and 8th magnitudes.

Position = 33° 24′ *sp* | 5 Obs. | Diff. = 1° 12′
Distance = 1′ 1″.539 | 5 Obs. | Diff. = 2″.091 } Very difficult.

(The star C being to the *south* of A.)

Passy; June 10, 1825; Seven-feet Equatorial.

9th and 8th magnitudes.

Distance = 1′ 1″.527 | 5 Obs. | Diff. = 0″.793. Very difficult.

The proximity of the star B to A, and neither of them bearing a good illumination, or a high magnifying power to separate them considerably from each other, render the observations of distance of the two stars A C difficult. (The star C is to the south of A.) Night pretty fine.

Mean Result.

Position 33° 34′ *sp*; Epoch 1824.48; Distance 1′ 1″.533; Epoch 1824.98.

No. DCLXXVI. R. A. 15h 54m; Decl. 33° 52′ N.

ρ Coronæ; STRUVE, 503; VI. 93.

Double; 6th and 15th magnitudes; small, blue.

Passy; June 17, 1825; Seven-feet Equatorial.

Position = 34° 34′ *sf* | 5 Obs. | Diff. = 0° 34′
Distance = 1′ 18″.799 | 5 Obs. | Diff. = 0″.962 } Excessively difficult.

Observed with 92: with a higher power I could not distinguish the small star, even under the most feeble illumination. The night is fine; but the measures are attended with such extreme difficulty, that those of distance are perhaps liable to a little inaccuracy.

No. DCLXXVI. continued.

Passy; June 19, 1825; Seven-feet Equatorial.

6th and 15th magnitudes.

Position = 35° 14′ *sf* | 5 Obs. | Diff. = 0° 48′ } Excessively difficult.
Distance = 1′ 20″.221 | 5 Obs. | Diff. = 0″.529 }

Observed on the meridian with 92; with a higher power the small star is not visible; the measures of distance were obtained with the utmost difficulty, and are perhaps of a suspicious character.

Passy; June 21, 1825; Seven-feet Equatorial.

6th and 15th or 20th magnitudes.

Position = 35° 30′ *sf* | 5 Obs. | Diff. = 1° 1′. Excessively difficult.

Observed with 92. Night tolerably good; but I could not procure a single measure of distance.

Passy; June 29, 1825; Seven-feet Equatorial.

6th and 14th or 15th magnitudes.

Distance = 1′ 18″.568 | 5 Obs. | Diff. = 2″.043. Excessively difficult.

Observed with 92. Stars very steady, and 45 minutes west of the meridian.

Mean Result.

Position 35° 6′ *sf*; Distance 1′ 19″.196; Epoch 1825.48.

Sir W. HERSCHEL states the position of this star on the 20th August 1783 at 54° 27′ *sf*, and its distance at 1′ 27″.73. This is indeed a surprising change in a star of the 6th class, and which can hardly be real. It is more than probable that a mistake of a revolution ($92\frac{1}{2}°$) in the reading off of the micrometer took place in the earlier measure, which would conciliate the results within about 3°. PIAZZI's catalogue assigns no proper motion to this star. (H.)

No. DCLXXVII. R. A. $16^h\ 15^m$; Decl. 14° 15′ N.

STRUVE, 517; II. 88.

Double; 8th and 12th magnitudes; small, decidedly light blue.

Passy; June 30, 1825; Seven-feet Equatorial.

Position = 48° 44′ *n p* | 5 Obs. | Diff. = 2° 37′ } Excessively difficult.
Distance = 6″.828 | 5 Obs. | Diff. = 0″.240 }

Observed when 20 minutes west of the meridian. Stars very steady; night fine; but the smaller bears only the slightest illumination.

Passy; July 4, 1825; Seven-feet Equatorial.

8th and 13th or 14th magnitudes.

Position = 47° 29′ *n p* | 5 Obs. | Diff. = 0° 42′. On the meridian.

The small star is light blue, but is so extremely faint, that I cannot get any observations of distance; the angles were procured with excessive difficulty.

Passy; July 8, 1825; Seven-feet Equatorial.

8th and 13th magnitudes.

Position = 48° 57′ *n p* | 5 Obs. | Diff. = 1° 14′. On the meridian.

The small star decidedly light blue, and under the most feeble illumination is so extremely indistinct, that measures of distance are impracticable.

Passy; July 13, 1825; Seven-feet Equatorial.

8th and 12th magnitudes.

Distance = 6″.713 | 5 Obs. | Diff. = 0″.408. Extremely difficult.

Observed when 30 minutes west of the meridian; but the small star is extremely indistinct, and scarcely bears the least illumination.

Mean Result.

Position 48° 23′ *n p*; Distance 6″.770; Epoch 1825.51.

In 1783 the position of this star was 44° 45′ *n p*, and its distance 6 or 7″; no material change therefore has taken place in it. (H.)

No. DCLXXVIII. R. A. $16^h\ 16^m$; Decl. 32° 45′ N.

23 Herculis; STRUVE, 518; V. 88.

Double; 7th and 11th magnitudes.

Passy; June 17, 1825; Seven-feet Equatorial.

Position = 69° 24′ *nf*	5 Obs.	Diff. = 0° 30′	Extremely difficult.
Distance = 36″.909	5 Obs.	Diff. = 0″.553	

The small star bears but a very feeble illumination.

Passy; June 18, 1825; Seven-feet Equatorial.

7th and 11th magnitudes.

Position = 69° 52′ *nf*	5 Obs.	Diff. = 1° 12′	Difficult.
Distance = 36″.780	5 Obs.	Diff. = 0″.769	

Observed on the meridian; night fine; but the small star does not bear a good illumination.

Mean Result.

Position 69° 38′ *nf*; Distance 36″.844; Epoch 1825.46.

This cannot be the same star as that described by Sir W. HERSCHEL as V. 88, whose angle of position is stated at 54° 6′ *sp* in 1783. (H.)

No. DCLXXIX. R. A. $16^h\ 32^m$; Decl. 23° 23′ N.

Nova;

Double; 8th and 9th magnitudes.

Passy; May 27, 1825; Seven-feet Equatorial.

Position = 1° 13′ *sf*	5 Obs.	Diff. = 0° 30′	Satisfactory.
Distance = 16″.860	5 Obs.	Diff. = 0″.601	

Passy; June 12, 1825; Seven-feet Equatorial.

8½ and 9th magnitudes.

Position = 0° 58′ *sf*	5 Obs.	Diff. = 0° 55′	Steady.
Distance = 17″.208	5 Obs.	Diff. = 0″.865	

Mean Result.

Position 1° 5′ *sf*; Distance 17″.034; Epoch 1825.42.

No. DCLXXX. R. A. $16^h\ 35^m$; Decl. 13° 58′ N.

Nova;

Double; 9th and 13th magnitudes.

Passy; June 9, 1825; Seven-feet Equatorial.

Position = 65° 26′ *np*	5 Obs.	Diff. = 1° 14	Excessively difficult.
Distance = 13″.535	5 Obs.	Diff. = 0″.529	

The night is very favourable, but the small star will not bear the slightest illumination; hence the results are liable to some inaccuracy.

Passy; June 12, 1825; Seven-feet Equatorial.

9th and 12th magnitudes.

Position = 65° 46′ *np*	5 Obs.	Diff. = 1° 32′	Excessively difficult.
Distance = 14″.323	5 Obs.	Diff. = 1″.274	

Observed on the meridian. Night fine; but neither star bears much illumination.

Mean Result.

Position 65° 36′ *np*; Distance 13″.929; Epoch 1825.45.

No. DCLXXXI. R. A. $16^h\ 38^m$; Decl. 28° 42′ N.

46 Herculis; STRUVE, 532; I. 79.

Double; 7th and 12th magnitudes; small star decidedly blue, and becomes much more distinct by slight illumination.

Blackman-street; April 28, 1824; Five-feet Equatorial.

Position = 73° 46′ *sf*	5 Obs.	Diff. = 3° 30′	Extremely difficult.
Distance = 4″.396	5 Obs.	Diff. = 1″.073	

Observed when $3^h\ 10'$ east of the meridian; the results must therefore not be deemed standard.

Blackman-street; June 29, 1824; Five-feet Equatorial.

7th and 10th magnitudes.

Position = 71° 8′ *sf*	5 Obs.	Diff. = 3° 0′	By twilight.
Position = 70° 44′ *sf*	5 Obs.	Diff. = 5° 55′	By lamp illumination.

The first series was observed when the stars were one hour east of the meridian, without artificial illumination; the last when they were 35 minutes distant from it. During strong twilight the blue colour of the small star was very decided.

No. DCLXXXI. continued.

Blackman-street; same date; Seven-feet Equatorial.

Position = 71° 12′ *s f* | 5 Obs. | Diff. = 1° 17′ } Remarkably steady.
Distance = 6″.770 | 5 Obs. | Diff. = 0″.288 }

Observed when ten minutes east of the meridian.

Blackman-street; July 3, 1824; Five-feet Equatorial.

7th and 11th magnitudes.

Position = 74° 43′ *s f* | 5 Obs. | Diff. = 2° 20′ } Very difficult.
Distance = 6″.124 | 5 Obs. | Diff. = 0″.632 }

Observed when the stars were a few minutes west of the meridian, but the night by no means favourable.

Passy; March 20, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 72° 3′ *s f* | 2 Obs. | Diff. = 0° 15′ } Mons. BOUVARD.
Position = 71° 49′ *s f* | 2 Obs. | Diff. = 3° 51′ } SOUTH.

Observed when three hours east of the meridian. Stars very unsteady; measures of distance impracticable.

Passy; June 10, 1825; Seven-feet Equatorial.

8th and 14th or 15th magnitudes.

Position = 75° 46′ *s f* | 5 Obs. | Diff. = 2° 8′. Excessively difficult.

Observed on the meridian, but the small star is so extremely indistinct that no measures of distance can be procured; and the observations of position are very suspicious.

Passy; June 14, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 74° 1′ *s f* | 7 Obs. | Diff. = 5° 2′. Extremely difficult.

Stars on the meridian; the smaller is very indistinct. Measures taken with the greatest care; but on account of the unsteadiness of the stars, they perhaps ought not to be considered standard.

No. DCLXXXI. continued.

Passy; June 18, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 73° 51′ *sf* | 7 Obs. | Diff. = 3° 47′
Distance = 5″.364 | 5 Obs. | Diff. = 0″.264 } Difficult.

Observed on the meridian. Stars well defined, and tolerably steady.

Passy; June 29, 1825; Seven-feet Equatorial.

8th and 11th magnitudes; small, light blue.

Position = 74° 10′ *sf* | 7 Obs. | Diff. = 1° 10′
Distance = 4″.791 | 5 Obs. | Diff. = 0″.360 } Not difficult.

Observed when 10 minutes west of the meridian. Evening very favourable; stars remarkably steady, and well defined. The results highly satisfactory. Examined the large star with 413 and 512, but found it perfectly round; hence the discordances do not arise from any elongation of *it*, under the ordinary observing powers employed.

Passy; June 30, 1825; Seven-feet Equatorial.

8th and 12th magnitudes.

Position = 77° 17′ *sf* | 7 Obs. | Diff. = 2° 7′
Distance = 5″.193 | 5 Obs. | Diff. = 0″.793 } Difficult.

Observed when 15 minutes west of the meridian. Stars faint, but very steady.

Passy; July 2, 1825; Seven-feet Equatorial.

8th and 12th magnitudes.

Position = 75° 11′ *sf* | 7 Obs. | Diff. = 2° 38′
Distance = 5″.102 | 5 Obs. | Diff. = 0″.601 } Excessively difficult.

Observed when 10 minutes west of the meridian. Stars tolerably steady, but the small one is very faint.

Mean Result.

Position 73° 51′ *sf* (69 Observations); Epoch 1825.05.

Distance 5″.391 (35 Observations); Epoch 1825.04.

A single measure in 1783 gave 66° 36′ *sf* for the position of this star, while another in 1802 gave 76° 18′. The present angle lies between them. This is a case, where from the

No. DCLXXXI. continued.

great inequality and closeness of the two stars, single measures cannot be regarded as of any weight; hence no certain conclusion can be drawn respecting its motion or rest. The distance however seems to have increased materially, as 5″.391 is much too great for a star of the first class; and in 1783 the interval between the discs was stated at from 1 to $1\frac{1}{4}$ diameter, according to the power used. This star should be watched: it is said to have a proper motion of 0″.14 per annum in R. A. (H.)

No. DCLXXXII. R. A. $16^h\ 39^m$; Decl. 30° 18′ N.

Nova;

Quadruple; A of the 9th, B of the 12th, C of $9\frac{1}{2}$, and D of the 15th magnitudes.

Measures of A B.

Passy; June 9, 1825; Seven-feet Equatorial.

Position = 59° 9′ *sf* | 5 Obs. | Diff. = 1° 44′ } Excessively difficult.
Distance = 14″.809 | 5 Obs. | Diff. = 0″.986 }

Night very fine, but the small star is extremely faint.

Passy; June 12, 1825; Seven-feet Equatorial.

9th and 11th magnitudes.

Position = 60° 16′ *sf* | 5 Obs. | Diff. = 2° 57′ } Extremely difficult.
Distance = 14″.713 | 5 Obs. | Diff. = 0″.865 }

Night favourable; but the small star is very indistinct.

Measures of A C.

Passy; June 9, 1825; Seven-feet Equatorial.

9th and $9\frac{1}{2}$ magnitudes.

Position = 50° 24′ *sf* | 5 Obs. | Diff. = 1° 18′ } Very good.
Distance = 1′ 4″.523 | 5 Obs. | Diff. = 0″.962 }

No. DCLXXXII. continued.

Passy; June 12, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 50° 30′ *sf* | 5 Obs. | Diff. = 0° 41′
Distance = 1′ 4″.076 | 5 Obs. | Diff. = 0″.865
} Satisfactory.

Measures of A D.

Passy; June 9, 1825; Seven-feet Equatorial.

9th and 15th magnitudes.

Position = 75° 30′ *nf*; very suspicious; (single measure.)

Distance estimated 3 or 4 seconds nearer to A than is the star C; but from extreme obscurity of D no measures can be obtained.

Passy; June 12, 1825; Seven-feet Equatorial.

9th and 15th, or 20th magnitudes.

Position = 77° 0′ *nf*; very precarious; (single measure.)

No measure of distance practicable. Night fine.

Mean Result.

of A B. Position 59° 42′ *sf*; Distance 14″.761;
of A C. Position 50° 27′ *sf*; Distance 1′ 4″.299;
of A D. Position 76° 15′ *nf*±; estimated distance 1 minute;
Epoch 1825.44.

No. DCLXXXIII. R. A. 16ʰ 42ᵐ; Decl. 36° 15′ N.

Nova;

Double; 9th and 10th magnitudes; the small star does not bear a good illumination.

Passy; June 5, 1825; Seven-feet Equatorial.

Position = 69° 19′ *nf* | 5 Obs. | Diff. = 2° 43′
Distance = 7″.249 | 5 Obs. | Diff. = 0″.384
} Extremely difficult.

Passy; June 12, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 69° 41′ *nf* | 5 Obs. | Diff. = 0° 57′
Distance = 7″.067 | 5 Obs. | Diff. = 0″.288
} Very difficult.

Small star is light blue, and bears only a very feeble illumination.

Mean Result.

Position 69° 30′ *nf*; Distance 7″.158; Epoch 1825.44.

No. DCLXXXIV. R. A. $17^h\ 3^m$: Decl. 30° 37′ N.

Nova;

Double; 7th and 10th magnitudes.

Passy; June 16, 1825; Seven-feet Equatorial.

Position = 88° 59′ *sf*	5 Obs.	Diff. = 1° 27′	Very difficult.
Distance = 24″.633	5 Obs.	Diff. = 0″.505	

The small star bears only a very feeble illumination.

Passy; June 19, 1825; Seven-feet Equatorial.

7th and 11th magnitudes.

Position = 89° 21′ *sf*	5 Obs.	Diff. = 1° 25′	Extremely difficult.
Distance = 24″.366	5 Obs.	Diff. = 0″.769	

The small star is extremely faint.

Mean Result.

Position 89° 10′ *sf*; Distance 24″.499; Epoch 1825.46.

No. DCLXXXV. R. A. $17^h\ 6^m$; Decl. 26° 25′ S.

38 Ophiuchi; I. 35; SOUTH'S Catalogue.

Double; 8th and 12th, or 13th magnitudes.

Passy; July 4, 1825; Seven-feet Equatorial.

Position = 61° 9′ *np*	7 Obs.	Diff. = 9° 0′	Unsteady.
Distance = 6″.249	5 Obs.	Diff. = 0″.962	

The small star is so excessively indistinct, that the measures, especially those of distance, must only be regarded as approximations.

The star here observed is indisputably 38 Ophiuchi. I had re-measured 36 Ophiuchi for it in Blackman-street twice during the summer of last year; not having found any other double star in the neighbourhood. On comparing however my observations with Sir W. HERSCHEL's, it was evident that we had not measured the same star; and by close attention the small star of 38 Ophiuchi was perceived. My first attempts to determine the distance proving unsuccessful, cautious estimation regarded it as 5 or 6 seconds: the night however having somewhat improved, the above *observations* of it were

No. DCLXXXV. continued.

procured. There is a small star* between 36 and 38, but which when examined with 413 and 512, I could not suspect to be double; nor was the large star of 38 sub-divided by those powers.

Passy; July 13, 1825; Seven-feet Equatorial.

8th and 13th, or 15th magnitudes.

Position = 62° 12′ *np*	7 Obs.	Diff. = 9° 6′	}	Excessively difficult.
Distance = 7″.785	5 Obs.	Diff. = 0″.360	}	

The small star is so extremely obscure, that the measures deserve but very little confidence. Observed on the meridian. Night favourable.

Passy; July 14, 1825; Seven-feet Equatorial.

8th and 14th, or 15th magnitudes.

Position = 60° 53′ *np*	7 Obs.	Diff. = 3° 52′	}	Excessively difficult.
Distance = 7″.359	5 Obs.	Diff. = 0″.601	}	

Observed on the meridian with 157: the small star so extremely faint, that with 181, the common observing power, I could not distinguish it. The accuracy of the results very questionable.

Passy; July 20, 1825; Seven-feet Equatorial.

8th and 13th, or 14th magnitudes.

Position = 59° 5′ *np*	7 Obs.	Diff. = 9° 50′	}	Extremely unsteady.
Distance = 7″.155	5 Obs.	Diff. = 1″.250	}	

The measures are so excessively difficult, that I feel but little confidence in their accuracy.

Mean Result.

Position 60° 50′ *np* (28 Obs.); Distance 7″.137; Epoch 1825.53.

If the star here measured be really the same with I. 35, its distance must be much increased. 7″.137 is a great distance, for a star even of the 2nd class. In 1783 it is described as having the interval of the discs only $1\frac{1}{4}$ diameter of the large star, which, for a star of the 8th magnitude, could hardly correspond to more than 4″ from centre to centre. The angles, it is true, agree—that given by Sir W. HERSCHEL in 1783 being 60° 48′ *np*, differing only 2′ from its present value. This star requires further observation. (H.)

* This star is 30 Scorpii, and it is the only star in the neighbourhood which is likely to be mistaken for 38 Ophiuchi.

No. DCLXXXVI. R. A. $17^h\ 11^m$; Decl. 28° 57′ N.

Nova;

Double; 8th and 9th magnitudes.

Passy; June 16, 1825; Seven-feet Equatorial.

Position = 85° 59′ *nf*	5 Obs.	Diff. = 0° 39′	Tolerably steady.
Distance = 55″.117	5 Obs.	Diff. = 0″.721	

Passy; June 19, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 85° 4′ *nf*	5 Obs.	Diff. = 0° 56′	Very difficult.
Distance = 54″.847	5 Obs.	Diff. = 0″.336	

The small star is very indistinct.

Mean Result.

Position 85° 31′ *nf*; Distance 54″.982; Epoch 1825.46.

No. DCLXXXVII. R. A. $17^h\ 13^m$; Decl. 24° 41′ N.

70 Herculis; STRUVE, 543.

Double; 5th and 9th magnitudes.

Blackman-street; July 10, 1824; Five-feet Equatorial.

Position = 33° 30′ *nf*	5 Obs.	Diff. = 0° 30′	Difficult.
Distance = 3′ 37″.433	5 Obs.	Diff. = 1″.168	

The small star bears much less illumination, than its apparent magnitude would lead us to expect. The night is cloudy; but between the clouds the stars are very brilliant.

Passy; June 23, 1825; Seven-feet Equatorial.

6th and 11th magnitudes.

Position = 33° 23′ *nf*	5 Obs.	Diff. = 0° 36′	Extremely difficult.
Distance = 3′ 39″.432	2 Obs.	Diff. = 0″.168	

The small star becomes invisible under a very feeble illumination; the distance is very suspicious.

Passy; July 14, 1825; Seven-feet Equatorial.

5th and 10th magnitudes.

Distance = 3′ 38″.151 | 5 Obs. | Diff. = 1″.875. Very steady.

Mean Result.

Position 33° 26′ *nf*; Epoch 1825.00; Distance 3′ 38″.339; Epoch 1825.18.

No. DCLXXXVIII. R. A. $17^h\ 18^m$; Decl. 37° 8′ N.

Nova;

Double; 8th and 11th magnitudes.

Passy; June 18, 1825; Seven-feet Equatorial.

Position = 76° 34′ *nf*	5 Obs.	Diff. = 1° 30′	Very difficult.
Distance = 33″.323	5 Obs.	Diff. = 0″.408	

Passy; July 2, 1825; Seven-feet Equatorial.

8th and 12th, or 13th magnitudes.

Position = 75° 52′ *nf*	5 Obs.	Diff. = 1° 0′	Steady.
Distance = 33″.373	5 Obs.	Diff. = 2″.645	

The small star is so extremely indistinct, that the measures are excessively difficult, and those of distance are open to suspicion.

Mean Result.

Position 76° 13′ *nf*; Distance 33″.348; Epoch 1825.49.

No. DCLXXXIX. R. A. $17^h\ 19^m$; Decl. 39° 25′ N.

Nova;

Double; 8th and 8½ magnitudes.

Passy; June 16, 1825; Seven-feet Equatorial.

Position = 71° 52′ *sp*	5 Obs.	Diff. = 1° 32′	Not steady.
Distance = 1′ 29″.018	5 Obs.	Diff. = 0″.577	

Passy; June 19, 1825; Seven-feet Equatorial.

8½ and 9th magnitudes.

Position = 71° 26′ *sp*	5 Obs.	Diff. = 0° 27′	Steady.
Distance = 1′ 29″.526	5 Obs.	Diff. = 0″.529	

Mean Result.

Position 71° 39′ *sp*; Distance 1′ 29″.272; Epoch 1825.46.

No. DCXC. R.A. $17^h\ 23^m$; Decl. 35° 5′ N.

Nova;

Double; 8th and 10th magnitudes.

Passy; June 9, 1825; Seven-feet Equatorial.

Position = 40° 26′ *sf* | 5 Obs. | Diff. = 1° 15′
Distance = 10″.711 | 5 Obs. | Diff. = 0″.264 } On the meridian.

The small star is blue, and bears a tolerable illumination. Night unusually fine.

Passy; June 29, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 44° 14′ *sf* | 5 Obs. | Diff. = 2° 51′
Distance = 9″.875 | 5 Obs. | Diff. = 0″.817 } On the meridian.

Stars remarkably steady; the small one is decidedly light blue, and bears only a feeble illumination; hence the measures are difficult.

Passy; July 2, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 39° 17′ *sf* | 5 Obs. | Diff. = 1° 42′
Distance = 10″.820 | 5 Obs. | Diff. = 0″.601 } Excessively difficult.

Small star decidedly pale blue, and bears but a very slight illumination. Stars steady, and 10 minutes west of the meridian.

Passy; July 14, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 38° 33′ *sf* | 5 Obs. | Diff. = 0° 45′
Distance = 10″.866 | 5 Obs. | Diff. = 0″.481 } Extremely difficult.

The small star is light blue, and bears only a very feeble illumination; night favourable; stars steady.

Mean Result.

Position 39° 25′ *sf*; Distance 10″.799; Epoch 1825.49.

The observations of June 29th are not included; as however the measures are of very considerable difficulty, I have not thought it advisable to suppress them.

No. DCXCI. R. A. $17^h\ 32^m$; Decl. 24° 30′ N.

STRUVE, 551; III. 104.

Triple; A 6th, B 10th, and C of the 9th magnitudes: the star B is decidedly blue, and bears a very considerable illumination.

Blackman-street; July 8, 1824; Seven-feet Equatorial.

Measures of A B.

Position = 81° 7′ *nf* | 5 Obs. | Diff. = 0° 31′
Distance = 17″.374 | 5 Obs. | Diff. = 0″.384 } On the meridian.

Passy; June 23, 1825; Seven-feet Equatorial.

7th and 10th magnitudes.

Position = 80° 57′ *nf* | 5 Obs. | Diff. = 1° 18′
Distance = 17″.054 | 5 Obs. | Diff. = 0″.649 } Very unsteady.

Measures of A C.

Blackman-street; July 8, 1824; Seven-feet Equatorial.

Position = 71° 54′ *sf* | 5 Obs. | Diff. = 0° 43′
Distance = 2′ 38″.081 | 5 Obs. | Diff. = 2″.091 } . . . .

Passy; June 23, 1825; Seven-feet Equatorial.

7th and 9th magnitudes.

Position = 71° 47′ *sf* | 5 Obs. | Diff. = 1° 21′
Distance = 2′ 38″.454 | 5 Obs. | Diff. = 0″.986 } Very unsteady.

Mean Result.

of A B. Position 81° 2′ *nf*; Distance 17″.214;
Epoch 1825.00.

of A C. Position 71° 50′ *sf*; Distance 2′ 28″.267;
Epoch 1825.00.

A very trifling change (+ 2° 46′) in position, and a rather more notable alteration (+ 2″.881) in distance, appear on comparing these observations with those of 1783. (H.)

No. DCXCII. R. A. $17^h\ 38^m$; Decl. 31° 14′ N.

Nova;

Double; 9th and 10th magnitudes.

Passy; June 9, 1825; Seven-feet Equatorial.

Position = 65° 55′ *np*	5 Obs.	Diff. = 1° 15′	On the meridian.
Distance = 5″.176	5 Obs.	Diff. = 0″.649	

The small star bears a tolerable illumination; yet the measures are difficult.

Passy; June 29, 1825; Seven-feet Equatorial.

9th and 10th, or 11th magnitudes.

Position = 66° 12′ *np*	5 Obs.	Diff. = 3° 55′	On the meridian.
Distance = 4″.883	5 Obs.	Diff. = 0″.697	

Stars very steady, but the small one bears but a very feeble illumination: the measures are very difficult.

Mean Result.

Position 65° 33′ *np*; Distance 5″.029; Epoch 1825.47.

No. DCXCIII. R. A. $17^h\ 39^m$; Decl. 27° 50′ N.

μ Herculis; STRUVE, 554; IV. 41.

Double; 5th and 12th, or 13th magnitudes; small, blue.

Passy; June 18, 1285; Seven-feet Equatorial.

Position = 28° 49′ *sp*	5 Obs.	Diff. = 0° 48′	Excessively difficult.
Distance = 29″.215	5 Obs.	Diff. = 0″.625	

The small star scarcely bears the slightest illumination.

Passy; July 1, 1825; Seven-feet Equatorial.

6th and 11th magnitudes.

Position = 29° 21′ *sp*	5 Obs.	Diff. = 0° 30′	Very difficult.
Distance = 29″.468	5 Obs.	Diff. = 1″.202	Extremely difficult.

The small star is decidedly blue, and bears but the most feeble illumination. Observed on the meridian; stars very steady; and I feel that the results merit considerable confidence.

No. DCXCIII. continued.

Passy; July 13, 1825; Seven-feet Equatorial.

5th and 13th, or 14th magnitudes.

Position = 29° 33′ *sp* | 5 Obs. | Diff. = 2° 30′ } Very steady.
Distance = 29″.208 | 5 Obs. | Diff. = 0″.601 }

The small star, which is blue, will bear scarcely the least illumination: the measures are excessively difficult.

Mean Result.

Position 29° 14′ *sp*; Distance 29″.297; Epoch 1825.50.

From an imperfect observation in 1783, which made the position at that time 30° ± *sp*, it should seem that this star is liable to no material change of position. (H.)

No. DCXCIV. R. A. 17h 48m; Decl. 1° 10′ N.

295 (Bode) Ophiuchi; South's Catalogue.

Double; 7th and 7½ magnitudes.

Blackman-street; June 26, 1824; Five-feet Equatorial.

Position = 32° 2′ *sp* | 5 Obs. | Diff. = 0° 32′ } Satisfactory.
Distance = 1′ 23″.070 | 5 Obs. | Diff. = 0″.537 }

Passy; June 30, 1825; Seven-feet Equatorial.

7th and 7½ magnitudes.

Position = 32° 11′ *sp* | 5 Obs. | Diff. = 1° 5′ } Very steady.
Distance = 1′ 22″.293 | 5 Obs. | Diff. = 0″.553 }

Observations very good.

Mean Result.

Position 32° 6′ *sp*; Distance 1′ 22″.681; Epoch 1825.00.

No. DCXCV. R. A. $17^h\ 48^m$; Decl. 25° 19′ N.

Nova;

Double; 8th and 10th magnitudes.

Passy; June 9, 1825; Seven-feet Equatorial.

Position = 53° 26′ *sf*	5 Obs.	Diff. = 4° 42′	Very difficult.
Distance = 6″.605	5 Obs.	Diff. = 0″.721	

The small star is light blue, and does not bear a good illumination. Night very favourable.

Passy; June 29, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 56° 24′ *sf*	5 Obs.	Diff. = 2° 29′	Very difficult.
Distance = 6″.931	5 Obs.	Diff. = 0″.408	

Observed when 5 minutes west of the meridian: stars very steady; the small one decidedly light blue, and bears only a very feeble illumination.

Passy; July 19, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 53° 39′ *sf* | 5 Obs. | Diff. = 1° 25′. Extremely difficult.

Stars a few minutes east of the meridian, and very unsteady; the small one decidedly light blue, and bears no illumination: measures of distance impracticable. Night very clear.

Mean Result.

Position 54° 30′ *sf*; Epoch 1825.50; Distance 6″.768; Epoch 1825.47.

No. DCXCVI. R. A. $17^h\ 51^m$; Decl. 6° 51′ S.

Nova;

Double; 9th and 11th magnitudes; small, blue.

Passy; June 9, 1825; Seven-feet Equatorial.

Position = 78° 20′ *np*	5 Obs.	Diff. = 1° 13′	On the meridian.
Distance = 8″.288	5 Obs.	Diff. = 0″.673	

The small star bears but a very feeble illumination. The night is remarkably fine, but the measures are very difficult.

Passy; July 4, 1825; Seven-feet Equatorial.

9th and 11th, or 12th magnitudes.

Position = 77° 11′ *np*	5 Obs.	Diff. = 1° 50′	On the meridian.
Distance = 8″.504	5 Obs.	Diff. = 0″.456	

The small star is decidedly pale blue, and bears but a very feeble illumination: the measures are extremely difficult.

Mean Result.

Position 77° 45′ *np*; Distance 8″.396; Epoch 1825.47.

No. DCXCVII. R. A. $17^h\,54^m$; Decl. 26° 33′ N.

STRUVE, 560; II. 90.

Double; 8½ and 12th magnitudes; small, decidedly light blue.

Passy; July 16, 1825; Seven-feet Equatorial.

Position = 71° 44′ *sf*	5 Obs.	Diff. = 1° 53′	Excessively difficult.
Distance = 7″.461	5 Obs.	Diff. = 0″.505	

Observed on the meridian. Night favourable; but the small star bears hardly any illumination. The results are somewhat suspicious.

Passy; July 18, 1825; Seven-feet Equatorial.

8½ and 11th, or 12th magnitudes.

Position = 71° 48′ *sf*	5 Obs.	Diff. = 1° 49′	Excessively difficult.
Distance = 7″.545	5 Obs.	Diff. = 0″.216	

Mean Result.

Position 71° 46′ *sf*; Distance 7″.503; Epoch 1825.54.

There is considerable discordance among the measures of this star at different epochs—that of 1783 making the position 75° 9′ *sf*, and that of 1802 77° 54′ *sf*. On the whole, there seems ground to believe in a slow motion of about $\frac{1}{6}$th of a degree per annum in the direction *np sf* or retrograde (—0°.167), while the distance has probably not undergone any sensible change. Future observations must decide the point. (H.)

No. DCXCVIII. R. A. $17^h\,54^m$; Decl. 22° 30′ S.

Nova;

Double; 8th and 9½ magnitudes.

Passy; June 30, 1825; Seven-feet Equatorial.

Position = 47° 22′ *np*	5 Obs.	Diff. = 1° 44′	Difficult.
Distance = 30″.228	5 Obs.	Diff. = 0″.841	

Observed when 10 minutes west of the meridian; stars very steady; but the small one does not bear a good illumination.

No. DCXCVIII. continued.

Passy; July 4, 1825; Seven-feet Equatorial.

9th and 11th magnitudes.

Position = 47° 33′ *np*	5 Obs.	Diff. = 1° 5′	}	Extremely difficult.
Distance = 31″.096	5 Obs.	Diff. = 0″.889	}	

The small star is blue, and bears scarcely any illumination: the observations of distance very suspicious. Several stars in the field.

Passy; July 10, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Distance = 31″.442 | 5 Obs. | Diff. = 0″.841. Very steady.

Measures excessively difficult; and I have so little confidence in them, that should they favour *one* set already taken, more than the *other*, they should not be employed to the exclusion of *either*. The small star is light blue, and becomes invisible under a very feeble illumination.

Mean Result.

Position 47° 27′ *np*; Distance 30″.922; Epoch 1825.51.

No. DCXCIX. R. A. 17h 56m; Decl. 25° 23′ N.

Nova;

Double; 8th and 11th magnitudes; small, light blue, and bears scarcely any illumination.

Passy; July 19, 1825; Seven-feet Equatorial.

Position = 53° 43′ *sp*	5 Obs.	Diff. = 2° 42′	}	Excessively difficult.
Distance = 18″.648	5 Obs.	Diff. = 0″.432	}	

Passy; July 20, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 52° 51′ *sp*	5 Obs.	Diff. = 1° 45′	}	Extremely difficult.
Distance = 18″.840	5 Obs.	Diff. = 0″.529	}	

Stars very unsteady; the small one is blue.

Mean Result.

Position 53° 17′ *sp*; Distance 18″.744; Epoch 1825.55.

No. DCC. R. A. $18^h\ 0^m$; Decl. 16° 43′ S.

Nova;

Double; 9th and $9\frac{1}{2}$ magnitudes.

Passy; July 10, 1825; Seven-feet Equatorial.

Position = 84° 47′ *np* | 5 Obs. | Diff. = 1° 21′
Distance = 29″.187 | 5 Obs. | Diff. = 0″.817 } Very steady.

Passy; July 13, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 84° 30′ *np* | 5 Obs. | Diff. = 1° 12′
Distance = 28″.751 | 5 Obs. | Diff. = 1″.034 } Very difficult.

Observed on the meridian: small star bears only the most feeble illumination. Night good.

Mean Result.

Position 84° 38′ *np*; Distance 28″.969; Epoch 1825.53.

No. DCCI. R. A. $18^h\ 15^m$; Decl. 6° 41′ S.

STRUVE, 574; Hist. Cæl. 474.

Double; 7th and 10th magnitudes.

Blackman-street; June 26, 1824; Five-feet Equatorial.

Position = 73° 17′ *sp* | 5 Obs. | Diff. = 2° 15′
Distance = 6″.680 | 5 Obs. | Diff. = 0″.284 } Extremely difficult.

The small star bears only the most feeble illumination.

Passy; June 30, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 70° 15′ *sp* | 5 Obs. | Diff. = 1° 11′
Distance = 6″.842 | 5 Obs. | Diff. = 0″.481 } Extremely difficult.

Observed on the meridian: stars very steady; the small one, which is very decidedly light blue, bears but the slightest illumination.

Passy; July 13, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 69° 29′ *sp* | 5 Obs. | Diff. = 1° 28′. Very difficult.

Observed on the meridian. Night favourable.

Mean Result.

Position 71° 0′ *sp*; Epoch 1825.11; Distance 6″.761; Epoch 1824.97.

No. DCCII. R. A. $18^h\ 20^m$; Decl. 19° 13′ N.

Nova;

Double; 8th and $8\frac{1}{2}$ magnitudes.

Passy; June 9, 1825; Seven-feet Equatorial.

Position = 77° 24′ *sp*	5 Obs.	Diff. = 2° 8′	}	Steady.
Distance = 6″.402	5 Obs.	Diff. = 0″.312	}	

A star of the 15th magnitude precedes to the north at an angle of 9 or 10 degrees, and distant from the larger of these stars perhaps 40 seconds: its obscurity renders measures of it impracticable.

Passy; June 30, 1825; Seven-feet Equatorial.

$8\frac{1}{2}$ and 9th magnitudes.

Position = 76° 19′ *nf*	5 Obs.	Diff. = 2° 14′	}	Very steady.
Distance = 6″.174	5 Obs.	Diff. = 0″.360	}	

Observed on the meridian: measures very satisfactory.

Mean Result.

Position 76° 51′ *sp* or *nf*; Distance 6″.288; Epoch 1825.49.

No. DCCIII. R. A. $18^h\ 25^m$; Decl. 32° 8′ N.

Nova;

Double; 9th and $10\frac{1}{2}$, or 11th magnitudes.

Passy; June 9, 1825; Seven-feet Equatorial.

Position = 66° 23′ *np*	5 Obs.	Diff. = 1° 44′	}	Very difficult.
Distance = 6″.533	5 Obs.	Diff. = 0″.384	}	

The night is extremely favourable, but the small star bears scarcely any illumination.

Passy; July 13, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 65° 55′ *sp*	5 Obs.	Diff. = 1° 9′	}	Very steady.
Distance = 6″.333	5 Obs.	Diff. = 0″.360	}	

The small star is blue, and bears a tolerable illumination.

Mean Result.

Position 66° 9′ *sp*; Distance 6″.433; Epoch 1825.48.

No. DCCIV. R. A. $18^h\ 32^m$; Decl. 9° 33′ N.

STRUVE, 582; Hist. Cæl. 87.

Double; 9th and 10th magnitudes; both bluish, and bear a tolerable illumination.

Blackman-street; July 12, 1824; Five-feet Equatorial.

Position = 0° 38′ *sp* | 5 Obs. | Diff. = 0° 34″
Distance = 57″.545 | 5 Obs. | Diff. = 1″.674 } Difficult.

Passy; July 4, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 1° 15′ *sp* | 5 Obs. | Diff. = 0° 50′
Distance = 56″.458 | 5 Obs. | Diff. = 0″.625 } Very difficult.

Stars very steady, but the small one does not bear a good illumination.

Passy; July 19, 1825; Seven-feet Equatorial.

9th and 9½, or 10th magnitudes.

Position = 1° 19′ *sp* | 5 Obs. | Diff. = 0° 34′
Distance = 57″.769 | 5 Obs. | Diff. = 0″.937 } Rather difficult.

Set the position wire to zero, and the small star remained above the wire, whilst the large one continued bisected by it, during their passage across the field.

Mean Result.

Position 1° 4′ *sp* (15 Obs.); Epoch 1825.20;
Distance 57″.657 (10 Obs.); Epoch 1825.04.

The observations of distance taken July 4, are rejected in taking the mean.

No. DCCV. R. A. $18^h\ 39^m$; Decl. 34° 22′ N.

Nova;

Double; large, white; small, light blue decidedly; 8½ and 11th magnitudes.

Passy; June 29, 1825; Seven-feet Equatorial.

Position = 68° 22′ *sf* | 5 Obs. | Diff. = 2° 12′
Distance = 4″.374 | 5 Obs. | Diff. = 0″.649 } Very steady.

Small star bears but a very feeble illumination, and the measures are extremely difficult.

No. DCCV. continued.

Passy; July 12, 1825; Seven-feet Equatorial.

8½ and 10th, or 11th magnitudes.

Position = 68° 3′ *sf* | 5 Obs. | Diff. = 2° 10′ } Tolerably steady.
Distance = 4″.611 | 5 Obs. | Diff. = 0″.601 }

The small star is light blue, and bears but a feeble illumination. Night favourable. Measures very difficult.

Mean Result.

Position 68° 12′ *sf*; Distance 4″.492; Epoch 1825.51.

No. DCCVI. R. A. 18ʰ 42ᵐ; Decl. 32° 37′ N.

ν Lyræ; STRUVE, 591; V. 40.

Double; 6th and 15th magnitudes.

Passy; August 10, 1825; Seven-feet Equatorial.

Position = 34° 24′ *sf* | 5 Obs. | Diff. = 1° 38′ } Excessively difficult.
Distance = 59″.933 ± | 3 Obs. | Diff. = 1″.082 }

Stars very steady, but the small one will bear no illumination. Observed on the meridian; the distance, I fear, may be liable to an error of two or three seconds. Night fine.

Passy; August 16, 1825; Seven-feet Equatorial.

6th and 15th magnitudes.

Position = 33° 32′ *sf* | 5 Obs. | Diff. = 0° 52′ } Excessively difficult.
Distance = 59″.748 | 3 Obs. | Diff. = 1″.202 }

Observed on the meridian. Night very favourable.

Mean Result.

Position 33° 58′ *sf* (10 Obs.); Distance 59″.840 (6 Obs.); Epoch 1825.61.

There appears to have taken place a change of no less than + 5° 21′ in the angle of position of this star since 1782, which for a star of the 5th class is considerable; unless indeed from the extreme minuteness of the small star, errors of observation to a larger amount than usual be supposed. (H.)

No. DCCVII. R. A. $18^h\ 51^m$; Decl. 13° 23′ N.

11 Aquilæ; STRUVE, 598; III. 32.

Double; 7th and 11th magnitudes; small, decidedly blue.

Blackman-street; July 11, 1824; Five-feet Equatorial.

Position = 28° 10′ *sp* | 5 Obs. | Diff. = 2° 1′
Distance = 19″.382 | 5 Obs. | Diff. = 1″.136 } Extremely difficult.

North following this, is a double star of the 4th class; but its stars are so extremely faint, that it is not measurable with this instrument.

Passy; July 4, 1825; Seven-feet Equatorial.

8th and 12th magnitudes.

Position = 30° 38′ *sp* | 5 Obs. | Diff. = 1° 4′
Distance = 19″.934 | 5 Obs. | Diff. = 0″.553 } Excessively difficult.

The small star scarcely bears the least illumination. Observed on the meridian.

Passy; July 19, 1825; Seven-feet Equatorial.

6th and 12th, or 13th magnitudes.

Position = 29° 35′ *sp* | 5 Obs. | Diff. = 2° 51′. Extremely difficult.

The small star is bluish, and becomes more distinct by a very slight illumination; yet it is so faint, that I can obtain no observations of distance. Night extremely clear, and stars on the meridian.

Mean Result.

Position 29° 28′ *sp* (15 Obs.); Epoch 1825.20;

Distance 19″.658; Epoch 1825.02.

The measure of Sir W. H. in 1802 makes the angle of position of this star 31′ 34′ *sp*, being only 2° 6′ different from the present. (H.)

No. DCCVIII. R. A. $18^h\ 52^m$; Decl. 14° 41′ N.

STRUVE, 599; II. 93.

Double; 8th and 12th magnitudes; small, light blue.

Passy; July 24, 1825: Seven-feet Equatorial.

Position = 15° 54′ *np* | 5 Obs. | Diff. = 3° 44′ } Excessively difficult.
Distance = 6″.133 | 5 Obs. | Diff. = 0″.673 }

The small star is so extremely faint, and bears so feeble an illumination, that a little inaccuracy of the results may be suspected. Observed when on the meridian: stars very steady. Night remarkably favourable.

Passy; July 25, 1825; Seven-feet Equatorial.

8th and 12th, or 13th magnitudes.

Position = 19° 29′ *np* | 5 Obs. | Diff. = 6° 55′. Excessively difficult.

The small star is only visible by glimpses, and then is so extremely indistinct, that to procure measures of distance is impossible.

Passy; July 27, 1825; Seven-feet Equatorial.

8th and 12th magnitudes

Position = 20° 20′ *np* | 5 Obs. | Diff. = 4° 10′ } Excessively difficult.
Distance = 7″.155 | 5 Obs. | Diff. = 0″.360 }

The small star is pale blue, and is so very obscure, that the measures are exceedingly precarious. Night fine.

Passy; July 28, 1825; Seven-feet Equatorial.

8½ and 12th magnitudes.

Position = 17° 32′ *np* | 5 Obs. | Diff. = 3° 42′ } Excessively difficult.
Distance = 6″.744 | 5 Obs. | Diff. = 0″.649 }

The night being very favourable and the stars steady, I applied a power of 157 to procure these observations: little or no advantage however was derived from the change: the measures are so extremely difficult, that I have no confidence in the accuracy of this, or of any individual series; the mean however of all, is probably not very remote from the truth.

No. DCCVIII. continued.

Mean Result.

Position 18° 19′ *np* (20 Obs); Distance 6″.677 (15 Obs.); Epoch 1825.57.

In 1783 the position was 16° 0′ *np*, and in 1802 16° 46′ *np*, so that this star has undergone no change. The distance too is nearly as it was. (H.)

No. DCCIX. R. A. $18^h\ 52^m$; Decl. 36° 11′ N.

STRUVE, 600; I. 58.

Double; 8th and 12th magnitudes; small, pale blue.

Passy; July 24, 1825; Seven-feet Equatorial.

Position = 20° 2′ *np*	5 Obs.	Diff. = 3° 30′	Excessively difficult.
Distance = 5″.556	5 Obs.	Diff. = 0″.721	

This star so much resembles the last measured double star (No. 708), that on observing it in the field of the telescope, I thought I had perhaps neglected to alter the direction of the instrument. The small star bears but the most feeble illumination; and although the night is in every respect favourable for delicate observations, still the results must be regarded with some distrust.

Passy; July 27, 1825; Seven-feet Equatorial.

8th and 11th, or 12th magnitudes.

Position = 20° 41′ *np*	5 Obs.	Diff. = 6° 11′	Excessively difficult.
Distance = 5″.400	5 Obs.	Diff. = 0″.192	

Observed when 15 minutes east of the meridian. Night very fine; but the small star will not bear any illumination. Measures of precarious accuracy.

Mean Result.

Position 20° 21′ *np*; Distance 5″.478; Epoch 1825.57.

In 1783 (1783.21) the angle of position was 13° 0′ *np*. Thus in 42.36 years + 7° 21′ have been described, being at the rate of + 0°.173 per annum. (H.)

No. DCCX. R. A. $18^h\ 57^m$; Decl. 16° 33′ S.

Nova;

Double; 6th and 10th magnitudes; small, light blue.

Passy; July 13, 1825; Seven-feet Equatorial.

Position = 85° 18′ *nf*	5 Obs.	Diff. = 1° 57′	Very difficult.
Distance = 7″.088	5 Obs.	Diff. = 0″.673	

Observed on the meridian. Night very favourable; but the small star bears only the most feeble illumination.

Passy; July 15, 1825; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = 85° 32′ *nf*	5 Obs.	Diff. = 2° 40′	Extremely difficult.
Distance = 7″.021	5 Obs.	Diff. = 0″.384	

Observed on the meridian. Stars very unsteady: the small one is light blue, and bears but a very slight illumination.

Mean Result.

Position 85° 25′ *nf*; Distance 7″.054; Epoch 1825.54.

No. DCCXI. R. A. $18^h\ 57^m$; Decl. 27° 4′ S.

Nova;

Double; 8th and 10th, or 11th magnitudes; small, blue.

Passy; July 13, 1825; Seven-feet Equatorial.

Position = 35° 38′ *sf*	5 Obs.	Diff. = 1° 7′	Very difficult.
Distance = 44″.375	5 Obs.	Diff. = 1″.154	

Observed when 10 minutes east of the meridian. Night very favourable, but the small star does not bear a good illumination.

Passy; July 15, 1825; Seven-feet Equatorial.

8th and 12th magnitudes.

Position = 33° 26′ *sf*	5 Obs.	Diff. = 1° 35′	Excessively difficult.
Distance = 45″.996	5 Obs.	Diff. = 0″.889	

Stars tolerably steady; but the small one will bear only the most feeble illumination. Night favourable.

No. DCCXI. continued.

Passy; July 19, 1825; Seven-feet Equatorial.

8th and 12th magnitudes.

Distance = 44″.952 | 5 Obs. | Diff. = 0″.697. Excessively difficult.

Observed with 157: the small star became invisible when 181 was employed. Night fine; but measures very suspicious, and must not be received to the exclusion of either set previously taken.

Mean Result.

Position 34° 32′ *sf* (10 Obs.); Epoch 1825.53;
Distance 45″.108 (15 Obs.); Epoch 1825.54.

No. DCCXII. R. A. $18^h\ 58^m$; Decl. 35° 32′ N.

STRUVE, 605; I. 59.

Double; $9\frac{1}{4}$ and $9\frac{1}{2}$ magnitudes; both white.

Passy; July 28, 1825; Seven-feet Equatorial.

Position = 77° 51′ *sp* | 6 Obs. | Diff. = 2° 29′
Distance = 2″.570 | 5 Obs. | Diff. = 0″.288 } Very steady.

Observed when half an hour east of the meridian; measures not difficult; the stars bear a very tolerable illumination.

Passy; July 29, 1825; Seven-feet Equatorial.

$9\frac{1}{4}$ and 10th magnitudes.

Position = 77° 20′ *sp* | 6 Obs. | Diff. = 6° 7′
Distance = 2″.782 | 5 Obs. | Diff. = 0″.288 } Difficult.

Observed on the meridian; stars neither steady nor neatly defined; the smaller is faint, but of the same colour as the larger.

Passy; July 31, 1825; Seven-feet Equatorial.

$9\frac{1}{4}$ and $9\frac{1}{2}$ magnitudes.

Position = 75° 41′ *sp* | 11 Obs. | Diff. = 4° 0′
Distance = 2″.739 | 5 Obs. | Diff. = 0″.336 } Rather difficult.

Stars on the meridian and tolerably steady; but the smaller one is indistinct.

No. DCCXII. continued.

Passy; August 1, 1825; Seven-feet Equatorial.

9½ and 9¼ magnitudes.

Position = 76° 19′ *s p*	11 Obs.	Diff. = 3° 46′	Tolerably easy.
Distance = 2″.710	5 Obs.	Diff. = 0″.288	

Observed on the meridian; stars steady, and well defined.

Mean Result.

Position 76° 34′ *s p* (34 Obs.); Distance 2″.700 (20 Obs.); Epoch 1825.58.

In 1783 the position was 75° 0′ *s p*, the interval of the discs 1 diameter. No change therefore has happened to this star. (H.)

No. DCCXIII. R. A. 18ʰ 59ᵐ; Decl. 75° 33′ N.

233 (BODE) Draconis; STRUVE, 606; Hist. Cæl. 360.

Double; 7½ and 8th magnitudes.

Blackman-street; June 26, 1824; Five-feet Equatorial.

Position = 52° 59′ *s p*	5 Obs.	Diff. = 1° 36′	Unsteady.
Distance = 6″.799	5 Obs.	Diff. = 0″.537	

Passy; July 14, 1825; Seven-feet Equatorial.

7½ and 8th magnitudes.

Position = 50° 29′ *s p*	5 Obs.	Diff. = 0° 51′	Very steady.
Distance = 6″.494	5 Obs.	Diff. = 0″.384	

Passy; July 16, 1825; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 53° 21′ *s p*	5 Obs.	Diff. = 1° 35′	Steady.
Distance = 6′.354	5 Obs.	Diff. = 0″.649	

The small star occasionally very faint.

Mean Result.

Position 52° 16′ *s p* (15 Obs.); Distance 6″.549 (15 Obs.); Epoch 1825.18.

No. DCCXIV. R. A. $19^h\ 2^m$; Decl. 34° 28′ N.

Nova;

Double; $8\frac{1}{2}$ and 10th magnitudes.

Passy; June 9, 1825; Seven-feet Equatorial.

Position = 1° 39′ *n p*	5 Obs.	Diff. = 0° 35′	Very difficult.
Distance = 12″.861	5 Obs.	Diff. = 0″.673	

After the measures were concluded, the position wire was placed at zero, and the small star was decidedly in the north preceding quadrant.

Passy; June 29, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 1° 59′ *n p*	5 Obs.	Diff. = 1° 2′	Very difficult.
Distance = 13″.265	5 Obs.	Diff. = 0″.505	

The small star is decidedly light blue, and does not bear a good illumination.

Mean Result.

Position 1° 49′ *n p*; Distance 13″.063; Epoch 1825.47.

No. DCCXV. R. A. $19^h\ 8^m$; Decl. 16° 15′ S.

Nova;

Double; 8th and $8\frac{1}{2}$ magnitudes.

Passy; July 14, 1825; Seven-feet Equatorial.

Position = 74° 42′ *n f*	5 Obs.	Diff. = 0° 58′	Very steady.
Distance = 8″.932	5 Obs.	Diff. = 0″.456	

Observed on the meridian.

About 39 seconds to the north of this star, and following it about 26 seconds of time, will be found another double star.

Passy; July 15, 1825; Seven-feet Equatorial.

$8\frac{1}{2}$ and 9th magnitudes.

Position = 74° 11′ *n f*	5 Obs.	Diff. = 0° 33′	Unsteady.
Distance = 9″.401	5 Obs.	Diff. = 0″.505	

No. DCCXV. continued.

Passy; August 12, 1825; Seven-feet Equatorial.

8½ and 9th magnitudes.

Position = 74° 47′ *nf* | 5 Obs. | Diff. = 0° 54′ } Unsteady.
Distance = 9″.195 | 5 Obs. | Diff. = 0″.841 }

Mean Result.

Position 74° 33′ *nf* (15 Obs.); Distance 9″.176 (15 Obs.); Epoch 1825.56.

No. DCCXVI. R. A. 19ʰ 8ᵐ; Decl. 16° 14′ S.

Nova;

Double; 10th and 10½ magnitudes; it is the star alluded to, in the observations of No. DCCXV.

Passy; July 14, 1825; Seven-feet Equatorial.

Position = 69° 49′ *sp* | 5 Obs. | Diff. = 1° 35′ } Excessively difficult.
Distance = 6″.153 | 5 Obs. | Diff. = 0″.721 }

These are pale blue stars, and do not bear any illumination. Observed when 25 minutes west of the meridian, and the measures are of doubtful accuracy.

Passy; July 19, 1825; Seven-feet Equatorial.

10th and 10½ magnitudes.

Position 71° 40′ *sp* | 5 Obs. | Diff. = 2° 15′ } Excessively difficult.
Distance 6″.419 | 5 Obs. | Diff. = 0″.432 }

These stars are of a pale blue colour, and scarcely bear the least illumination. Observed when 10 minutes west of the meridian.

Passy; August 12, 1825; Seven-feet Equatorial.

10th and 10½ magnitudes.

Position = 71° 3′ *sp* | 5 Obs. | Diff. = 2° 10′. Excessively difficult.

These stars are pale blue, and bear but the most feeble illumination. Observed on the meridian.

Mean Result.

Position 70° 51′ *sp* (15 Obs.); Epoch 1825.56;
Distance 6″.286 (10 Obs.); Epoch 1825.54.

No. DCCXVII. R. A. $19^h\ 11^m$; Decl. 12° 1′ N.

28 Aquilæ; STRUVE, 618; V. 34.

Double; 6th and 12th magnitudes; small, decidedly blue, and bears a tolerably good illumination.

Blackman-street; July 11, 1824; Five-feet Equatorial.

Position = 84° 31′ *sf*	5 Obs.	Diff. = 2° 11′	. . . .
Distance = 59″.422	5 Obs.	Diff. = 0″.758	

Passy; July 20, 1825; Seven-feet Equatorial.

7th and 10th magnitudes.

Position = 85° 41′ *sf*	5 Obs.	Diff. = 1° 21′	Unsteady.
Distance = 59″.139	5 Obs.	Diff. = 1″.322	

The small star is blue, and bears a good illumination. Observed on the meridian.

Mean Result.

Position 85° 6′ *sf*; Distance 59″.280; Epoch 1825.04.

Sir W. HERSCHEL has no measures of this star. (H.)

No. DCCXVIII. R. A. $19^h\ 25^m$; Decl. 27° 54′ N.

STRUVE, 624; II. 99.

Double; 8th and 12th magnitudes.

Passy; September 27, 1824; Seven-feet Equatorial.

Position = 87° 18′ *nf*	5 Obs.	Diff. = 2° 35′	Excessively difficult.
Distance = 8″.005	5 Obs.	Diff. = 2″.115	

The small star scarcely bears the least illumination. Night fine.

Passy; July 19, 1825; Seven-feet Equatorial.

Position = 85° 35′ *nf*	5 Obs.	Diff. = 2° 5′	Excessively difficult.
Distance = 6″.761	5 Obs.	Diff. = 0″.841	

The small star is blue, and is so extremely obscure, that the results are somewhat suspicious. Night favourable.

Passy; July 31, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 85° 22′ *nf*	5 Obs.	Diff. = 1° 52′	Extremely difficult.
Distance = 5″.908	5 Obs.	Diff. = 0″.288	

Observed on the meridian: the small star is light blue, and bears a very feeble illumination. Night very fine.

No. DCCXVIII. continued.

Passy; August 1, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 84° 17′ *nf* | 5 Obs. | Diff. = 1° 35′ } Excessively difficult.
Distance = 6″.686 | 5 Obs. | Diff. = 0″.481 }

Stars tolerably steady, and on the meridian. Night fine.

Mean Result.

Position 85° 38′ *nf* (20 Obs.); Distance 6″.840 (20 Obs.); Epoch 1825.36.

The angle in 1783 was 87° 48′ *nf*, differing only 2° 10′ from the present. Of course no change can be concluded. (H.)

No. DCCXIX. R. A. 19ʰ 25ᵐ; Decl. 36° 21′ N.

Nova;

Triple; A of the 9th, B of the 10th, and C of the 9th magnitudes.

Measures of A B.

Passy; July 24, 1825; Seven-feet Equatorial.

Position = 32° 36′ *nf* | 5 Obs. | Diff. = 3° 52′ } Extremely difficult.
Distance = 6″.311 | 5 Obs. | Diff. = 0″.649 }

Night very favourable; stars very steady; but the smaller one is faint. Observed on the meridian.

Passy; July 27, 1825; Seven-feet Equatorial.

Position = 34° 49′ *nf* | 5 Obs. | Diff. = 2° 12′ } Very difficult.
Distance = 6″.280 | 5 Obs. | Diff. = 0″.673 }

The small star is indistinct: the night very fine.

Passy; July 28, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 32° 55′ *nf* | 5 Obs. | Diff. = 2° 1′. Very difficult.

Stars very steady, but the small one scarcely bears any illumination.

No. DCCXIX. continued.

Measures of A C.

Passy; July 24, 1825; Seven-feet Equatorial.

Position = 24° 38′ *nf* or *sp*	5 Obs.	Diff. = 1° 13′	Satisfactory.
Distance = 53″.169	5 Obs.	Diff. = 0″.553	

By directing the eye to another part of the field, I can suspect the star C to be double; if so, its small star is more minute than the small one of ε Lyræ; is south preceding, and is rather nearer to C, than is B to A. Night remarkably fine; stars very steady.

Passy; July 27, 1825; Seven-feet Equatorial.

Position = 24° 54′ *nf* or *sp*	5 Obs.	Diff. = 2° 28′	Very steady.
Distance = 53″.287	5 Obs.	Diff. = 0″.529	

Each star of the 9th or 9½ magnitude, but occasionally indistinct.

Mean Result.

of A B. Position 33° 27′ *nf* (15 Obs.); Distance 6″.295 (10 Obs.);
of A C. Position 24° 46′ *nf*; Distance 53″.228;
Epoch 1825.57.

No. DCCXX. R. A. 19ʰ 27ᵐ; Decl. 10° 33′ S.

STRUVE, 625; I. 13;

Double; 8½ and 12th magnitudes.

Passy; July 18, 1825; Seven-feet Equatorial.

Position = 44° 0′ *np*	5 Obs.	Diff. = 4° 41′	Very difficult.
Distance = 4″.135	5 Obs.	Diff. = 0″.360	

The small star is light blue, and bears only a very feeble illumination. Night clear, but the stars of low altitude are very unsteady.

Passy; July 28, 1825; Seven-feet Equatorial.

8½ and 12th magnitudes.

Position = 46° 23′ *np*	5 Obs.	Diff. = 3° 40′	Excessively difficult.
Distance = 4″.570	5 Obs.	Diff. = 0″.360	

The night is very favourable for difficult observations; but although the stars are very steady, yet the measures are so extremely difficult, that I fear they merit but little confidence. Sir W. HERSCHEL having described it as a triple star, I applied a power of 413, but no third star could be even suspected.

No. DCCXX. continued.

Passy; August 10, 1825; Seven-feet Equatorial.

8½ and 11th magnitudes.

Position = 47° 36′ *n p*	5 Obs.	Diff. = 4° 35′	Excessively difficult.
Distance = 4″.166	5 Obs.	Diff. = 0″.841	

Observed on the meridian. Stars steady, yet the measures are unsatisfactory: the small one is pale blue, and does not bear a good illumination.

Passy; August 20, 1825; Seven-feet Equatorial.

8½ and 11th magnitudes.

Position = 46° 14′ *n p*	5 Obs.	Diff. = 4° 3′	Excessively difficult.
Distance = 5″.075	5 Obs.	Diff. = 0″.745	

Observed on the meridian; night favourable; small star blue, and scarcely bears any illumination.

Mean Result.

Position 46° 3′ *n p* (20 Obs.); Distance 4″.488 (20 Obs); Epoch 1825.59.

Sir W. HERSCHEL's measures of this star stand as follows:

1782.77 - - - 37° 15′ *n p*. Mean of two measures.

1802.76 - - - 44° 45′ *n p*.

This star then appears to be subject to a slow motion, amounting to about + 0°.148 per annum; but the data are too precarious to speak with certainty. (H.)

No. DCCXXI. R. A. 19ʰ 29ᵐ; Decl. 16° 4′ N.

ε Sagittæ; STRUVE, 628; VI. 26.

Double; 5th and 9th, or 10th magnitudes; small, blue.

Blackman-street; July 11, 1824; Five-feet Equatorial.

Position = 8° 56′ *n f*	5 Obs.	Diff. = 1° 15′	Steady.
Distance = 1′ 31″.541	5 Obs.	Diff. = 0″.569	

No. DCCXXI. continued.

Passy; July 15, 1825; Seven-feet Equatorial.

5th and 9th magnitudes.

Position = 8° 58′ *nf* | 5 Obs. | Diff. = 0° 33′
Distance = 1′ 32″.286 | 5 Obs. | Diff. = 0″.625
} Tolerably steady.

Mean Result.

Position 8° 57′ *nf*; Distance 1′ 31″.913; Epoch 1825.03.

This star affords an instance of very exact coincidence of measures with those ef Sir W. HERSCHEL in 1782, which are 8° 32′ *nf* for the position, and for the distance 1′ 31″.9 "extremely exact." (H.)

No. DCCXXII. R. A. 19^h 29^m; Decl. 17° 19′ S.

STRUVE, 627; Hist. Cæl. 116.

Double; 8th and 8½ magnitudes.

Passy; July 16, 1825; Seven-feet Equatorial.

Position = 33° 1′ *sp* | 5 Obs. | Diff. = 1° 48′
Distance = 10″.861 | 5 Obs. | Diff. = 0″.120
} Extremely unsteady.

Observed on the meridian.

Passy; July 18, 1825; Seven-feet Equatorial.

8½ and 8¼ magnitudes.

Position = 32° 30′ *sp* | 5 Obs. | Diff. = 0° 57′
Distance = 10″.478 | 5 Obs. | Diff. = 0″.745
} Extremely unsteady.

Observed on the meridian.

Mean Result.

Position 32° 45′ *sp*; Distance 10″.669; Epoch 1825.54.

No. DCCXXIII. R. A. $19^h\ 36^m$; Decl. $10°\ 21'$ N.

STRUVE, 632; I. 91.

Double; $8\frac{1}{2}$ and 11th magnitudes.

Passy; July 18, 1825; Seven-feet Equatorial.

Position = $6°\ 28'$ *np*	5 Obs.	Diff. = $5°\ 44'$	On the meridian.
Distance = $3''.770$	5 Obs.	Diff. = $0''.336$	

The small star is decidedly light blue, and is rendered rather more distinct by slight illumination; under however sufficient to show the wires of the micrometer pleasantly, it becomes invisible: the measures are excessively difficult, and some degree of suspicion attaches to the results. Night remarkably clear, but the stars are not steady.

Passy; July 28, 1825; Seven-feet Equatorial.

8th and 12th magnitudes.

Position = $6°\ 26'$ *np*	5 Obs.	Diff. = $3°\ 20'$	20 minutes east of the meridian.
Distance = $4''.219$	5 Obs.	Diff. = $0''.360$	

Measures excessively difficult: stars very steady; the small one is blue.

Mean Result.

Position $6°\ 27'$ *np*; Distance $3''.994$; Epoch 1825.56.

Sir W. HERSCHEL's measures are—1783, Position $8°\ 18'$ *np*, and 1802, $12°\ 23'$ *np*. These, discordant as they are with the present measure and with each other, yet afford somewhat of a presumption of a very slow change of position in the direction *np sf* or retrograde. (H.)

No. DCCXXIV. R. A. $19^h\ 39^m$; Decl. $20°\ 30'$ N.

Nova;

Double; 9th and 11th, or 12th magnitudes.

Passy; August 17, 1825; Seven-feet Equatorial.

Position = $6°\ 45'$ *np*	5 Obs.	Diff. = $0°\ 30'$	Excessively difficult.
Distance = $4''.871$	5 Obs.	Diff. = $0''.553$	

The small star is light blue, and becomes more distinct by a slight illumination; yet the measures are so excessively difficult, that it will be useless to attempt observing it, except under the most favourable circumstances. The present is a night peculiarly fine, and the stars are remarkably steady and well defined.

No. DCCXXIV. continued.

Passy; August 20, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 6° 24′ *sp*	5 Obs.	Diff. = 2° 53′	Excessively difficult.
Distance = 5″.374	5 Obs.	Diff. = 0″.553	

This star is also double of the 5th class. By directing the eye to another part of the field, a star of the 15th or 20th magnitude may be perceived almost directly preceding. No measures of it however can be obtained with this instrument; yet the night is favourable, and the observations are made on the meridian.

Mean Result.

Position 6° 34′ *sp*; Distance 5″.122; Epoch 1825.63.

No. DCCXXV. R. A. 19^h 39^m; Decl. 34° 37′ N.

STRUVE, 638; V. 137.

Double; 7th and 10th magnitudes; small, decidedly blue, and bears a very good illumination.

Blackman-street; July 11, 1824; Five-feet Equatorial.

Position = 61° 2′ *nf*	5 Obs.	Diff. = 1° 14′	Unsteady.
Distance = 39″.127	5 Obs.	Diff. = 0″.916	

Passy; July 19, 1825; Seven-feet Equatorial.

6th and 9th magnitudes.

Position = 60° 37′ *nf*	5 Obs.	Diff. = 1° 8′	Steady.
Distance = 38″.398	5 Obs.	Diff. = 1″.010	

Passy; July 31, 1825; Seven-feet Equatorial.

6th and 9th magnitudes.

Position = 60° 47′ *nf*	5 Obs.	Diff. = 0° 28′	Very satisfactory.
Distance = 38″.709	5 Obs.	Diff. = 0″.336	

Mean Result.

Position 60° 49′ *nf* (15 Obs.); Distance 38″.745 (15 Obs.); Epoch 1825.22.

The position in 1783 was 57° 3′ *nf*, differing only 3° 46′ from the present angle. There is an apparent increase of distance to the amount of + 3″.73 since that epoch; but this is very precarious. (H)

No. DCCXXVI. R. A. $19^h\ 40^m$; Decl. 32° 27′ N.

Nova;

Double; 7th and 9th magnitudes.

Passy; July 24, 1825; Seven-feet Equatorial.

Position = 63° 23′ *s p*	5 Obs.	Diff. = 0° 56′	Satisfactory.
Distance = 33″.227	5 Obs.	Diff. = 0″.649	

The small star is blue, and bears a very good illumination. Night very favourable; stars remarkably steady.

Passy; July 25, 1825; Seven-feet Equatorial.

7th and 9½ magnitudes.

Position = 63° 37′ *s p*	5 Obs.	Diff. = 1° 35′	Unsteady.
Distance = 33″.662	5 Obs.	Diff. = 0″.913	

Observed on the meridian: the small star is blue.

Mean Result.

Position 63° 30′ *s p*; Distance 33″.444; Epoch 1825.56.

No. DCCXXVII. R. A. $19^h\ 48^m$; Decl. 0° 2′ N.

STRUVE, 644; II. 95.

Double; 9½ and 10th magnitudes.

Passy; September 24, 1824; Seven-feet Equatorial.

Position = 26° 53′ *n p*	5 Obs.	Diff. = 1° 38′	Very difficult.
Distance = 5″.472	5 Obs.	Diff. = 0″.793	

The dew collects so rapidly on the object-glass, although a tube of pasteboard projects 12 inches beyond the object-end of the telescope, that to see these stars it is absolutely necessary to wipe it between each measure; but the stars are well defined, and are unusually steady.

Passy; July 20, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 26° 31′ *n p*	5 Obs.	Diff. = 1° 35′	Extremely difficult.
Distance = 5″.703	5 Obs.	Diff. = 0″.793	

These stars are of a pale blue colour, and neither bear illumination nor magnifying power. Observed on the meridian.

No. DCCXXVII. continued.

Mean Result.

Position 26° 42′ *n p*; Distance 5″.587; Epoch 1825.14.

The measures of 1783 and 1802 give 29° 3′ *n p*, and 30° 2′ *n p* respectively for the angles of position. The estimations in diameters of the distance correspond to about 5 or 6″ central distance. This star therefore has not varied sensibly. (H.)

No. DCCXXVIII. R. A. 19^h 43^m: Decl. 43° 55′ N.

STRUVE, 643; III. 112.

Double; 8th and 8½ magnitudes.

Blackman-street; June 28, 1824; Five-feet Equatorial.

Position = 69° 42′ *sf*	5 Obs.	Diff. = 1° 45′	SOUTH.
Position = 69° 45′ *sf*	5 Obs.	Diff. = 2° 34′	Mr. RICHARDSON.
Distance = 10″.789	5 Obs.	Diff. = 0″.916	SOUTH.

The night is become so bad, no more observations can be gotten.

Passy; July 15, 1825; Seven-feet Equatorial.

8½ and 8¼ magnitudes.

Position = 71° 2′ *sf*	5 Obs.	Diff. = 1° 0′	Very steady.
Distance = 10″.454	5 Obs.	Diff. = 0″.264	

Passy; August 31, 1825; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 71° 2′ *sf*	5 Obs.	Diff. = 1° 21′	Tolerably steady.
Distance = 10″.101	5 Obs.	Diff. = 0″.360	

Mean Result.

Position 70° 23′ *sf* (20 Obs.); Distance 10″.415 (15 Obs.); Epoch 1825.23.

This position differs only 0° 37′ from that of 1783. The distances too present an exact correspondence, Sir W. HERSCHEL's measure being 10″.140. (H.)

No. DCCXXIX. R. A. $19^h\ 52^m$; Decl. 35° 3′ N.

Nova;

Triple; A of the 9th, B of the 10th, and C of the 6th magnitudes.

Measures of A B.

Passy; July 24, 1825; Seven-feet Equatorial.

Position = 25° 20′ *n p*	5 Obs.	Diff. = 1° 48′	Extremely difficult.
Distance = 4″.460	5 Obs.	Diff. = 0″.360	

Observed on the meridian; stars very steady. Night fine.

Passy; July 28, 1825; Seven-feet Equatorial.

9½ and 10th magnitudes.

Position = 26° 15′ *n p*	5 Obs.	Diff. = 2° 22′	Very difficult.
Distance = 4″.176	5 Obs.	Diff. = 0″.336	

Observed on the meridian. Night very favourable.

Measures of A C.

Passy; July 24, 1825; Seven-feet Equatorial.

9th and 6th magnitudes.

Position = 34° 16′ *s p*	2 Obs.	Diff. = 0° 2′	Very steady.
Distance = 4′ 3″.859	2 Obs.	Diff. = 0″.240	

(C being to the south of A.)

Passy; July 28, 1825; Seven-feet Equatorial.

9½ and 6th magnitudes.

Position = 34° 8′ *s p*	2 Obs.	Diff. = 0° 11′	Night fine.
Distance = 4′ 1″.910	2 Obs.	Diff. = 0″.216	

(C being to the south of A.)

Mean Result.

of A B. Position 25° 47′ *n p*; Distance 4″.318;

of A C. ——— 34° 12′ *s p*; ——— 4′ 2″.884;

Epoch 1825.57.

No. DCCXXX. R. A. $19^h\ 52^m$; Decl. 17° 7′ N.

Nova; $nf\ \chi$ Sagittæ; χ only seen single.

Double; $7\frac{1}{2}$ and 8th magnitudes.

Blackman-street; July 13, 1824; Five-feet Equatorial.

Position = 74° 20′ *nf*	5 Obs.	Diff. = 0° 32	. . . .
Distance = 1′ 55″.642	5 Obs.	Diff. = 1″.231	

(Same date and Instrument.)

Measures of χ with the brightest of this double star.

Position = 77° 7′ *sp*	2 Obs.	Diff. = 0° 12′	. . . .
Distance = 5′ 40″.516	2 Obs.	Diff. = 0″.284	

(χ preceding to the south.)

Passy; July 20, 1825; Seven-feet Equatorial.

6th and 9th magnitudes.

Position = 74° 0′ *nf*	5 Obs.	Diff. = 0° 56′	Unsteady.
Distance = 1′ 56″.220	5 Obs.	Diff. = 0″.721	

Mean Result.

Position 74° 10′ *nf*; Distance 1′ 55″.981; Epoch 1825.04.

Of χ Sagittæ and the brightest of this double star,

Position 77° 7′; Distance 5′ 40″.516 (χ preceding to the south.)

No. DCCXXXI. R. A. $19^h\ 53^m$; Decl. 46° 54′ N.

Nova;

Double; 9th and $9\frac{1}{4}$ magnitudes.

Passy; September 1, 1825; Seven-feet Equatorial.

Position = 62° 51′ *nf*	6 Obs.	Diff. = 1° 35′	Tolerably steady.
Distance = 5″.432	5 Obs.	Diff. = 0′.432	

Observed on the meridian. Night favourable.

Passy; September 2, 1825; Seven-feet Equatorial.

9th and $9\frac{1}{4}$ magnitudes.

Position = 64° 11′ *nf*	6 Obs.	Diff. = 0° 32′	Rather difficult.
Distance = 6″.191	5 Obs.	Diff. = 0″.360	

Observed on the meridian; stars very steady.

No. DCCXXXI. continued.

Passy; September 4, 1825; Seven-feet Equatorial.

Equal; each of the 11th magnitude.

Position = 63° 4′ *sp* or *nf*	6 Obs.	Diff. = 3° 18′	Extremely difficult.
Distance = 6″.400	5 Obs.	Diff. = 0″.360	

Night very hazy. Should these observations accord with one set already taken more than with the other, they must not be received to the exclusion of the discordant series.

Passy; September 5, 1825; Seven-feet Equatorial.

Equal; each of the 9th magnitude.

Position = 64° 3′ *sp* or *nf*	6 Obs.	Diff. = 1° 37′	Difficult.
Distance = 5″.494	5 Obs.	Diff. = 0″.240	

Observed on the meridian. Night hazy.

Passy; September 6, 1825; Seven-feet Equatorial.

Equal; each of the 10th magnitude.

Position = 62° 52′ *sp* or *nf* | 6 Obs. | Diff. = 3° 7′. Very difficult.

Stars tolerably steady; but the night is so extremely hazy, that no observations of distance can be procured.

Passy; September 8, 1825; Seven-feet Equatorial.

9½ and 10th magnitudes.

Distance = 6″.282 | 5 Obs. | Diff. = 0″.793. Extremely difficult.

Night so hazy, that the stars are only visible by glimpses.

Passy; September 9, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Distance = 6″.150 | 5 Obs. | Diff. = 0″.745. Tolerably steady.

Mean Result.

Position 63° 24′ *sp* or *nf* (30 Obs.); Distance 5″.992 (30 Obs.); Epoch 1825.68.

No. DCCXXXII. R. A. $20^h\ 0^m$; Decl. 20° 36′ N.

Nova;

Double; 9th and 11th, or 12th magnitudes.

Passy; August 17, 1825; Seven-feet Equatorial.

Position = 70° 37′ *np*	5 Obs.	Diff. = 2° 17′	Excessively difficult.
Distance = 4″.317	5 Obs.	Diff. = 0″.456	

The small star is pale blue, and is rendered more distinct by slight illumination; yet the measures are so excessively difficult, that it is useless to attempt observing it except under the most favourable circumstances, such as the present, when the stars generally are remarkably brilliant, and when they pass through the field of the telescope as steadily as possible. Observed 35 minutes east of the meridian.

Passy; August 20, 1825; Seven-feet Equatorial.

8th and 11th or 12th magnitudes.

Position = 71° 23′ *np*	5 Obs.	Diff. = 1° 56′	Excesssively difficult.
Distance = 4″.719	5 Obs.	Diff. = 0″.384	

The small star, which is pale blue, bears but a very feeble illumination. Night favourable.

Mean Result.

Position 71° 0′ *np*; Distance 4″.518; Epoch 1825.63.

No. DCCXXXIII. R. A. $20^h\ 2^m$; Decl. 34° 57′ N.

Nova;

Double; $8\frac{1}{2}$ and $9\frac{1}{2}$ magnitudes; bear a good illumination.

Passy; August 1, 1825; Seven-feet Equatorial.

Position = 32° 24′ *np*	5 Obs.	Diff. = 2° 20′	Very steady.
Distance = 5″.600	5 Obs.	Diff. = 0″.360	

Observed on the meridian. Night very fine.

Passy; August 9, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 33° 12′ *np*	5 Obs.	Diff. = 1° 10′	Very difficult
Distance = 5″.111	5 Obs.	Diff. = 0″.505	

Night hazy. Observed on the meridian.

Mean Result.

Position 32° 48′ *np*; Distance 5.″355; Epoch 1825.59.

No. DCCXXXIV. R. A. $20^h\ 2^m$; Decl. 16° 16′ N.

STRUVE, 659; II. 70.

Double; 8th and 11th, or 12th magnitudes.

Passy; August 20, 1825; Seven-feet Equatorial.

Position = 74° 41′ *nf*	5 Obs.	Diff. = 1° 52′	Excessively difficult.
Distance = 6″.682	5 Obs.	Diff. = 0″.360	

Night very favourable; but the small star will scarcely bear any illumination.

Passy; August 21, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 76° 7′ *nf*	5 Obs.	Diff. = 0° 20′	Excessively difficult.
Distance = 6″.528	5 Obs.	Diff. = 0″.481	

The small star, which is light blue, under a very slight illumination becomes invisible.

Mean Result.

Position 75° 24′ *nf*; Distance 6″.605; Epoch 1825.64.

There is no evidence of a change of position in this star. Its position in 1783 was 72° 57′ *nf*. Its distance, estimated at 2 diameters between the discs, may correspond to a central distance of about 4, 5, or 6 seconds, according to the atmospheric or other circumstances at the time of observation. (H.)

No. DCCXXXV. R. A. $20^h\ 2^m$; Decl. 0° 40′ S.

STRUVE, 661; P. XX. 11, 12; V. 136.

Double; $7\frac{1}{2}$ and 8th magnitudes.

Blackman-street; July 11, 1824; Five-feet Equatorial.

Position = 68° 7′ *sp*	5 Obs.	Diff. = 1° 40′	. . . .
Distance = 54″.362	5 Obs.	Diff. = 0″.913	

Passy; November 3, 1824; Seven-feet Equatorial.

$7\frac{1}{2}$ and 8th magnitudes.

Position = 67° 33′ *sp*	5 Obs.	Diff. = 1° 26′	. . . .
Distance = 54″.768	5 Obs.	Diff. = 1″.443	

No. DCCXXXV. continued.

Passy; August 10, 1825; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 67° 29′ *sp*	5 Obs.	Diff. = 0° 35′	Very steady.
Distance = 54″.881	5 Obs.	Diff. = 0″.962	

Observed on the meridian. Night hazy.

Mean Result.

Position 67° 43′ *sp* (15 Obs.); Distance 54″.670 (15 Obs.); Epoch 1825.01.

The present result differs only 1° 55′ in position from Sir W. HERSCHEL's measure in 1783. (H.)

No. DCCXXXVI. R. A. 20h 2m; Decl. 20° 22′ N.

θ Sagittæ; STRUVE, 660: III. 24.

Triple; A of the 6th, B of the 10th or 11th, and C of the 7th magnitudes.

Measures of A B.

Blackman-street; July 4, 1824; Five-feet Equatorial.

Position = 58° 1′ *np*	5 Obs.	Diff. = 1° 47′	Very difficult.
Distance = 11″.786	5 Obs.	Diff. = 0″.721	

Observed on the meridian; the small star does not bear a good illumination.

Passy; November 3, 1824; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = 58° 5′ *np*	5 Obs.	Diff. = 2° 48′	Very difficult.
Distance = 12″.161	5 Obs.	Diff. = 0″.625	

Passy; August 12, 1825; Seven-feet Equatorial.

7th and 10th magnitudes.

Position = 57° 47′ *np*	5 Obs.	Diff. = 1° 16′	Unsteady.
Distance = 11″.383	5 Obs.	Diff. = 0″.577	

Observed on the meridian; small star rather faint, but the measures are good.

No. DCCXXXVI. continued.

Measures of A C.

Blackman-street; July 4, 1824; Five-feet Equatorial.

6th and 7th magnitudes.

Position = 43° 16′ *s p*	5 Obs.	Diff. = 0° 13′	. . . . .
Distance = 1′ 10″.402	5 Obs.	Diff. = 0″.432	

Passy; November 3, 1824; Seven-feet Equatorial.

6th and 7th magnitudes.

Position = 43° 39′ *s p*	5 Obs.	Diff. = 1° 40′	. . . . .
Distance = 1′ 9″.839	5 Obs.	Diff. = 1″.635	

Passy; August 12, 1825; Seven-feet Equatorial.

7½ and 8th magnitudes.

Position = 42° 39′ *s p*	5 Obs.	Diff. = 0° 31′	Unsteady.
Distance = 1′ 10″.022	5 Obs.	Diff. = 1″.755	

Mean Result.

of A B. Position 57° 58′ *n p* (15 Obs.);
Distance 11″.777 (15 Obs.)

of A C. Position 43° 11′ *s p* (15 Obs.);
Distance 1′ 10″.088 (15 Obs.)

Epoch 1824.98.

Sir W. HERSCHEL has no measures of the positions of these stars. The distance of A B he makes 11″ 4‴, agreeing pretty well with the present; while that of A C is stated by him at 59″ 49‴, a convincing proof of some cause of error in the micrometer when opened to considerable distances, and which has been already alluded to. What this cause of error may have been, whether parallax, or the resistance of a spiral steel spring straining the threads of the screw immoderately, it is useless now to enquire; but the whole tenor of the observations goes to prove, that distances less than 20 or 30″ are not affected by it. (H.)

No. DCCXXXVII. R. A. $20^h\ 2^m$; Decl. 20° 25′ N.

Nova;

Double; 8th and 10th magnitudes.

Blackman-street; July 4, 1824; Five-feet Equatorial.

Position = 39° 33′ *sf*	5 Obs.	Diff. = 2° 7′	Difficult.
Distance = 1′ 41″.290	5 Obs.	Diff. = 0″.727	

Passy; November 7, 1824; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 39° 15′ *sf*	5 Obs.	Diff. = 1° 30′	Very difficult.
Distance = 1′ 40″.848	5 Obs.	Diff. = 3″.474	

Small star blue, and very faint. Night hazy.

Mean Result.

Position 39° 24′ *sf*; Distance 1′ 41″.069; Epoch 1824.68.

No. DCCXXXVIII. R. A. $20^h\ 4^m$; Decl. 33° 7′ N.

STRUVE, 663; Hist. Cæl. 297.

Double; 8th and 9th magnitudes; small, blue.

Blackman-street; July 11, 1824; Five-feet Equatorial.

Position = 22° 41′ *sf*	5 Obs.	Diff. = 0° 45′	. . . .
Distance = 41″.842	5 Obs.	Diff. = 0″.569	

Passy; November 7, 1824; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 21° 49′ *sf*	5 Obs.	Diff. = 0° 16′	. . . .
Distance = 41″.883	5 Obs.	Diff. = 1″.082	

Mean Result.

Position 22° 15′ *sf*; Distance 41″.862; Epoch 1824.69.

No. DCCXXXIX. R.A. $20^h\ 5^m$; Decl. $6°\ 33'$ S.

Nova;

Double; 8th and 10th magnitudes.

Passy; September 2, 1825; Seven-feet Equatorial.

Position $= 39°\ 22'\ nf$ | 5 Obs. | Diff. $= 2°\ 8'$
Distance $= 25''.128$ | 5 Obs. | Diff. $= 0''.889$ } Rather difficult.

Observed on the meridian; stars tolerably steady.

Passy; September 9, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position $= 39°\ 23'\ nf$ | 2 Obs. | Diff. $= 0°\ 54'$. Extremely difficult.

Night is now so hazy, that the small star is no longer visible.

Passy; September 10, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position $= 39°\ 31'\ nf$ | 5 Obs. | Diff. $= 2°\ 9'$
Distance $= 25''.104$ | 5 Obs. | Diff. $= 1''.370$ } Extremely difficult.

Night hazy; the small star is blue.

Mean Result.

Position $39°\ 26'\ nf$ (12 Obs.); Distance $25''.116$ (10 Obs.); Epoch 1825.69.

No. DCCXL. R.A. $20^h\ 5^m$; Decl. $6°\ 4'$ N.

Struve, 664; P. XX. 43, 44.

Double; equal; each of the 7th magnitude.

Blackman-street; July 4, 1824; Five-feet Equatorial.

Position $= 77°\ 9'\ sp$ or nf | 5 Obs. | Diff. $= 0°\ 46'$
Distance $= 44''.070$ | 5 Obs. | Diff. $= 1''.421$ . . . . .

Observed when $1^h\ 15'$ east of the meridian, but the stars are very steady.

Passy; November 6, 1824; Seven-feet Equatorial.

Equal; each of the 8th magnitude.

Position $= 77°\ 13'\ sp$ or nf | 5 Obs. | Diff. $= 1°\ 43'$
Distance $= 43''.717$ | 5 Obs. | Diff. $= 1''.178$ . . . . .

Mean Result.

Position $77°\ 11'\ sp$ or nf; Distance $43''.893$; Epoch 1824.67.

No. DCCXLI. R. A. $20^h\ 7^m$; Decl. 21° 45′ N.

Nova;

Triple; A 8th, B 8¼, and C of the 12th magnitudes.

Measures of A B.

Passy; August 1, 1825; Seven-feet Equatorial.

Position = 85° 42′ *nf* | 5 Obs. | Diff. = 1° 37′
Distance = 7″.033 | 5 Obs. | Diff. = 0″.456 } Tolerably steady.

Passy; August 9, 1825; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 86° 45′ *nf* | 5 Obs. | Diff. = 1° 42′
Distance = 6″.265 | 5 Obs. | Diff. = 0″.649 } Extremely unsteady.

Night hazy; stars 20 minutes west of the meridian when observed.

Passy; September 2, 1825; Seven-feet Equatorial.

8½ and 9½ magnitudes.

Distance = 6″.465 | 5 Obs. | Diff. = 0″.336. Very hazy.

Passy; September 15, 1825; Seven-feet Equatorial.

8th and 8¼ magnitudes.

Distance = 5″.992 | 5 Obs. | Diff. = 0″.649. Steady.

Measures of A C.

Passy; August 1, 1825; Seven-feet Equatorial.

Position = 60° 15′ *sf* | 5 Obs. | Diff. = 1° 55′
Distance = 58″.156 | 5 Obs. | Diff. = 0″.481 } Very difficult.

8th and 12th magnitudes.

Passy; September 2, 1825; Seven-feet Equatorial.

8¼ and 12th magnitudes.

Position = 60° 8′ *sf* | 5 Obs. | Diff. = 1° 40′
Distance = 56″.694 | 5 Obs. | Diff. = 0″.913 } Excessively difficult.

The small star bears but the slightest illumination, and the observations, particularly of distance, are a little suspicious. Night hazy.

Passy; September 15, 1825; Seven-feet Equatorial.

8th and 12th magnitudes.

Distance = 57″.124 | 5 Obs. | Diff. = 0″.817. Excessively difficult.

No. DCCXLI. continued.

Mean Result.

of A. B. Position 86° 13′ *nf* (10 Obs.); Epoch 1825.59;
Distance 6″.439 (20 Obs.); Epoch 1825.64.
of A C. Position 60° 12′ *sf* (10 Obs.); Epoch 1825.62;
Distance 57″.325 (15 Obs.); Epoch 1825.65.

No. DCCXLII. R. A. 20ʰ 8ᵐ; Decl. 46° 12′ N.
o^3 Cygni; STRUVE, 667; VI. 10.
Double; 5th and 8th magnitudes.

Blackman-street; June 28, 1824; Five-feet Equatorial.

Position = 84° 0′ *sf*	5 Obs.	Diff. = 0° 15′	. . . .
Distance = 1′ 46″.376	5 Obs.	Diff. = 1″.042	

Observed when 4 hours east of the meridian.

Passy; November 3, 1824; Seven-feet Equatorial.

5th and 8th magnitudes.

Position = 83° 47′ *sf*	5 Obs.	Diff. = 0° 35′	. . . .
Distance = 1′ 46″.410	5 Obs.	Diff. = 1″.250	

Mean Result.

Position 85° 53′ *sf*; Distance 1′ 46″.393; Epoch 1824.66.

The position of 1781 is 87° 14′ *sp*, differing 8° 53′ from the present; an extraordinary change for a star of the 6th class, and one so easy of measurement. In PIAZZI's catalogue, a proper motion of — 0″.03 in R. A. and + 0″.18 in declination is ascribed to the large star. This should carry the large star almost directly away from the small one (and indeed there is an apparent increase of 6″ in the distance, could the earlier measure be relied on); but no sensible change of angle could thus arise. This star should be re-measured after a lapse of 20 or 30 years. (H.)

No. DCCXLIII. R. A. $20^h\ 10^m$; Decl. 47° 10′ N.

32 Cygni; STRUVE, 669; VI. 32.*

Double; 5th and 9th magnitudes.

Blackman-street; June 28, 1824; Five-feet Equatorial.

Position = 85° 34′ *sf*	5 Obs.	Diff. = 0° 18′	. . . .
Distance = 3′ 28″.972	5 Obs.	Diff. = 0″.769	

Passy; November 3, 1824; Seven-feet Equatorial.

5th and 9th magnitudes.

Position = 85° 34′ *sf*	5 Obs.	Diff. = 0° 32′	. . . .
Distance = 3′ 28″.621	5 Obs.	Diff. = 1″.587	

Mean Result.

Position 85° 34′ *sf*; Distance 3′ 28″.496; Epoch 1824.66.

No. DCCXLIV. R. A. $20^h\ 11^m$; Decl. 12° 28′ N.

Nova;

Double; $8\frac{1}{2}$ and $8\frac{3}{4}$ magnitudes.

Passy; July 29, 1825; Seven-feet Equatorial.

Position = 52° 50′ *np*	5 Obs.	Diff. = 0° 57′	Good measures.
Distance = 28″.562	5 Obs.	Diff. = 0″.240	

Observed on the meridian; stars tolerably steady.

Passy; July 31, 1825; Seven-feet Equatorial.

$8\frac{1}{2}$ and $8\frac{1}{4}$ magnitudes.

Position = 52° 51′ *np*	5 Obs.	Diff. = 0° 46′	Very satisfactory.
Distance = 28″.205	5 Obs.	Diff. = 0″.288	

Mean Result.

Position 52° 51′ *np*; Distance 28″.383; Epoch 1825.58.

* So called in STRUVE's Catalogue, but erroneously. VI. 32 is λ Cygni R. A. $20^h\ 40^m$. (H.)

No. DCCXLV. R. A. $20^h\ 11^m$; Decl. 15° 21′ S.

β Capricorni; STRUVE, 670; VI. 28.

Triple; A 5th, B of the 7th, and C of the 10th magnitudes.

Measures of A B.

Blackman-street: July 12, 1824; Five-feet Equatorial.

Position = 2° 54′ *sp*	5 Obs.	Diff. = 0° 23′	. . . .
Distance = 3′ 24″.100	5 Obs.	Diff. = 0″.600	

Passy; November 7, 1824; Seven-feet Equatorial.

6th and 8th magnitudes.

Position = 2° 55′ *sp*	5 Obs.	Diff. = 0° 29′	Very hazy.
Distance = 3′ 23″.330	5 Obs.	Diff. = 1″.034	

Observed when 1 hour west of the meridian.

Measures of A C.

Passy; November 9, 1824; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = 43° 27′ *sf*	5 Obs.	Diff. = 0° 25′	Very difficult.
Distance = 3′ 46″.862	5 Obs.	Diff. = 1″.803	

Night hazy; small star is extremely faint.

Passy; August 31, 1825; Seven-feet Equatorial.

5th and 11th magnitudes.

Position = 43° 54′ *sf*	5 Obs.	Diff. = 0° 42′	Extremely difficult.
Distance = 3′ 46″.571	5 Obs.	Diff. = 0″.889	

Observed on the meridian; small star is blue, and bears only a very slight illumination.

Mean Result.

of A B. Position 2° 54′ *sp*; Distance 3′ 23″.715;

Epoch 1824.69.

of A C. Position 43° 40′ *sf*; Distance 3′ 46″.716;

Epoch 1825.35.

Sir W. HERSCHEL has given no measures of this star. (H.)

No. DCCXLVI. R. A. $20^h\ 12'$; Decl. $45°\ 4'$ N.

STRUVE, 671; Hist. Cæl. 240.

Double; $9\frac{1}{2}$ and 10th magnitudes.

Blackman-street; July 12, 1824; Five-feet Equatorial.

Position = $43° 59'$ *sp*	5 Obs.	Diff. = $2° 37'$	}	Difficult.
Distance = $9''.143$	5 Obs.	Diff. = $0''.284$	}	

Passy; November 7, 1824; Seven-feet Equatorial.

$9\frac{1}{2}$ and 10th magnitudes.

Position = $42° 58'$ *sp*	5 Obs.	Diff. = $3° 12'$	}	Excessively difficult.
Distance = $8''.687$	5 Obs.	Diff. = $2''.332$	}	

The Night has become so foggy, that I can observe no longer.

Mean Result.

Position $43° 28'$ *sp*; Distance $8''.915$; Epoch 1824.69.

No. DCCXLVII. R. A. $20^h\ 14^m$; Decl. $15°\ 50'$ N.

Nova;

Triple; A 9th, B $9\frac{1}{2}$, and C of the 15th magnitudes.

Measures of A B.

Passy; August 1, 1825; Seven-feet Equatorial.

Position = $62° 5'$ *sf*	5 Obs.	Diff. = $1° 13'$	}	Rather difficult.
Distance = $31''.500$	5 Obs.	Diff. = $1''.370$	}	

The star B bears only an indifferent illumination.

Passy; August 12, 1825; Seven-feet Equatorial.

9th and $9\frac{1}{2}$ magnitudes.

Position = $61° 16'$ *sf*	5 Obs.	Diff. = $1° 1'$	}	Difficult.
Distance = $30''.477$	5 Obs.	Diff. = $0''.577$	}	

Neither of these stars will bear a good illumination.

Passy; September 2, 1825; Seven-feet Equatorial.

9th and $10\frac{1}{2}$ magnitudes.

Distance = $30''.259$ | 5 Obs. | Diff. = $0''.745$. Extremely difficult.

The star B bears but the slightest illumination.

No. DCCXLVII. continued.

Measures of B C.

Passy; August 1, 1825; Seven-feet Equitorial.

When the eye is directed to another part of the field, the southern star (B) is seen also double; but its small star is so extremely faint, that to obtain any thing like measures of accuracy is impossible.

Position = 17°,0′ ± *nf*; Distance = 13 seconds (by estimation).

Passy; September 2 1825; Seven-feet Equitorial.

The star B is certainly double of the 2d or 3d class; but its small star, which is *nf*, is so excessively obscure, that no observations of it can be procured. Night fine; stars steady.

Mean Result.

A B. Position 61° 40′ *sf* (10 Obs.); Epoch 1825.59;
Distance 30″.745 (15 Obs); Epoch 1825.62.

B C. Position 17° ± *nf*; Distance 13 seconds. (Each by estimation.)

No. DCCXLVIII. R. A. 20^h 18^m; Decl. 13° 44′ S.

STRUVE, 675; Hist. Cæl. 176.

Double; 9$\frac{1}{2}$ and 10th magnitudes; and bear but a very feeble illumination.

Passy; September 17, 1824; Seven-feet Equatorial.

Position = 23° 39′ *nf*	5 Obs.	Diff. = 1° 6′	On the meridian.
Distance = 24″.743	3 Obs.	Diff. = 1″.130	

Night fine; stars steady; but the measures are extremely difficult.

Passy; November 9, 1824; Seven-feet Equatorial.

9$\frac{1}{2}$ and 10th or 11th magnitudes.

Position = 23° 10′ *nf*	5 Obs.	Diff. = 1° 5′	35 minutes west of the meridian.
Distance = 23″.659	5 Obs.	Diff. = 1″.587	

Measures extremely difficult; the small star scarcely bears any illumination.

Passy; August 21, 1825; Seven-feet Equatorial.

10th and 11th magnitudes.

Distance = 23″.008 | 5 Obs. | Diff. = 0″.841. Excessively difficult.

Night fine; but neither star will bear sufficient illumination.

Mean Result.

Position 23° 25′ *nf*; (10 Obs.); Epoch 1824.78;
Distance 23″.803; (15 Obs.); Epoch 1825.07.

No. DCCXLIX. R. A. $20^h\ 18^m$; Decl. 2° 42′ S.

STRUVE, 674; P. XX. 140.

Double; $6\frac{1}{2}$ and 7th magnitudes.

Blackman-street; July 12, 1824; Five-feet Equatorial.

Position = 80° 57′ *sp* | 5 Obs. | Diff. = 1° 15′
Distance = 59″.359 | 5 Obs. | Diff. = 0″.288 . . .

Passy; November 6, 1824; Seven-feet Equatorial.

$7\frac{1}{2}$ and 8th magnitudes.

Position = 80° 24′ *sp* | 5 Obs. | Diff. = 1° 10′
Distance = 1′ 0″.219 | 5 Obs. | Diff. = 1″.707 } Night not favourable.

Passy; August 14, 1825; Seven-feet Equatorial.

$6\frac{1}{2}$ and 7th magnitudes.

Position = 80° 25′ *sp* | 5 Obs. | Diff. = 0° 38′
Distance = 1′ 0″.039 | 3 Obs. | Diff. = 0″.240 } Very steady.

Observations very satisfactory.

Mean Result.

Position 80° 35′ *sp* (15 Obs.); Distance 59″.872 (15 Obs.); Epoch 1825.00.

No. DCCL. R. A. $20^h\ 22^m$; Decl. 25° 48′ N.

Nova;

Double; $8\frac{1}{4}$ and $8\frac{3}{4}$ magnitudes.

Passy; July 29, 1825; Seven-feet Equatorial.

Position = 54° 25′ *np* | 5 Obs. | Diff. = 2° 33′
Distance = 1′ 6″.932 | 5 Obs. | Diff. = 1″.034 } Tolerably steady.

Passy; July 31, 1825; Seven-feet Equatorial.

$8\frac{1}{2}$ and 9th magnitudes.

Position = 54° 1′ *np* | 5 Obs. | Diff. = 0° 45′
Distance = 1′ 6″.490 | 5 Obs. | Diff. = 0″.408 } Very steady.

Mean Result.

Position 54° 13′ *np*; Distance 1′ 6″.711; Epoch 1825.58.

No. DCCLI. R. A. $20^h\ 22^m$; Decl. 10° 45′ N.

15 (BODE) Delphini; STRUVE, 681; III. 16.

Double; equal; each 7th magnitude.

Passy; October 5, 1825; Seven-feet Equatorial.

Position = 13° 19′ *nf* or *sp*	5 Obs.	Diff. = 1° 13′	SOUTH.
Distance = 14″.662	5 Obs.	Diff. = 0″.889	
Position = 13° 58′ *nf* or *sp*	5 Obs.	Diff. = 1° 15′	Capt. BEAUFORT.
Distance = 14″.782	5 Obs.	Diff. = 0″.745	

Stars tolerably steady. Night fine.

Passy; October 7, 1825; Seven-feet Equatorial.

Equal; each 7½ magnitude.

Position = 13° 12′ *nf* or *sp*	5 Obs.	Diff. = 0° 37′	SOUTH.
Distance = 14″.667	5 Obs.	Diff. = 0″.673	
Position = 13° 49′ *nf* or *sp*	5 Obs.	Diff. = 1° 18′	Capt. BEAUFORT.
Distance = 14″.643	5 Obs.	Diff. = 0″.456	

Mean Result.

Position 13° 35′ *nf* or *sp* (20 Obs.); Distance 14″.689 (20 Obs.); Epoch 1825.76.

The observation of 1781 makes the position of this star 9° 42′ *sp*, and its distance 12″ 5‴ "exactly measured." The change in position is not considerable; but an increase of 2″.6 in distance, or more than a sixth, is rather too much to be attributed to errors of observation. (H.)

No. DCCLII. R. A. $20^h\ 22^m$; Decl. 18° 48′ N.

STRUVE, 678; Hist. Cæl. 537.

Double; 7th and 7¼ magnitudes.

Blackman-street; July 4, 1824; Five-feet Equatorial.

Position = 18° 31′ *np*	5 Obs.	Diff. = 0° 58′	Very steady.
Distance = 1′ 45″.415	5 Obs.	Diff. = 0″.408	

Observed when $1^h\ 45^m$ west of the meridian.

No. DCCLII. continued.

Passy; November 6, 1824; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 18° 22′ *np*	5 Obs.	Diff. = 0° 21′	Hazy.
Distance = 1″.44″.350	5 Obs.	Diff. = 0″.817	

Observed when 45 minutes west of the meridian.

Passy; August 10, 1825; Seven-feet Equatorial.

7th and 7½ magnitudes.

Position = 19° 2′ *np*	5 Obs.	Diff. = 0° 28′	Very satisfactory.
Distance = 1′ 46″.365	5 Obs.	Diff. = 1″.106	

Mean Result.

Position 18° 38′ *np* (15 Obs.); Distance 1′ 45″.377 (15 Obs.); Epoch 1824.98.

No. DCCLIII. R. A. 20h 22m; Decl. 56° 3′ N.

37 (Bode) Cephei; Struve, 679.

Double; 8th and 10th magnitudes; the small star is decidedly blue.

Blackman-street; July 12, 1824; Five-feet Equatorial.

Position = 29° 59′ *sf*	5 Obs.	Diff. = 1° 58′	. . . .
Distance = 26″.545	5 Obs.	Diff. = 1″.136	

Passy; November 16, 1824; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 29° 18′ *sf*	5 Obs.	Diff. = 1° 17′	. . . .
Distance = 26″.347	5 Obs.	Diff. = 1″.755	

Mean Result.

Position 29° 38′ *sf*; Distance 26″.446; Epoch 1824.70.

No. DCCLIV. R. A. $20^h\ 23^m$; Decl. 25° 53′ N.

Nova;

Double; 9th and 9½ magnitudes.

Passy; July 29, 1825: Seven-feet Equatorial.

Position = 31° 23′ *n p*	5 Obs.	Diff. = 1° 34′	Rather difficult.
Distance = 25″.686	5 Obs.	Diff. = 1″.250	

Stars tolerably steady; but the small one does not bear a good illumination.

Passy; July 31, 1825; Seven-feet Equatorial.

9½ and 10th magnitudes.

Position = 31° 6′ *n p*	5 Obs.	Diff. = 2° 48′	Difficult.
Distance = 25″.662	5 Obs.	Diff. = 1″.082	

Stars steady; but the smaller one is faint.

Mean Result.

Position 31° 14′ *n p*; Distance 25″.674; Epoch 1825.58.

No. DCCLV. R. A. $20^h\ 25^m$; Decl. 48° 37′ N.

210 (BODE) Cygni; STRUVE, 683.

Double; 6th and 10th magnitudes; small, blue.

Passy; September 24, 1824; Seven-feet Equatorial.

Position = 8° 21′ *n p*	5 Obs.	Diff. = 1° 10′	Extremely difficult.
Distance = 1′ 1″.583	5 Obs.	Diff. = 1″.563	

Another double star of the 4th class (7th and 15th magnitudes) follows it; but the small star is so extremely faint, that it is unmeasurable to-night, perhaps in consequence of the moisture precipitated on the object-glass, which exceeds any thing I have as yet witnessed.

Passy; November 16, 1824; Seven-feet Equatorial.

Position = 9° 3′ *n p* | 3 Obs. | Diff. = 0° 45′. Excessively difficult.

No observations of distance can be procured; one half of the object-glass is rendered useless, by the interference of the transverse timber which connects the east and west sides of the observatory.

Passy; August 31, 1825; Seven-feet Equatorial.

6th and 11th magnitudes.

Position = 9° 8′ *n p*	5 Obs.	Diff. = 0° 48′	Excessively difficult.
Distance = 1′ 1″.191	5 Obs.	Diff. = 1″.034	

The small star bears but a very slight illumination.

No. DCCLV. continued.

Mean Result.

Position 8° 49′ *n p* (13 Obs.); Epoch 1825.09;
Distance 1′ 1″.387 (10 Obs.); Epoch 1825.19.

There is some reason to suppose that Sir W. HERSCHEL has erroneously called this star ω^2 Cygni, which it certainly is not; ω^2 as far as my instruments can inform me is single.

No. DCCLVI. R. A. $20^h\ 26^m$; Decl. 48° 37′ N.

ω^3 Cygni; STRUVE, 684; IV. 24.*

Double; 6th and 12th, or 15th magnitudes; the small star bears no illumination; it is the double star alluded to in the observations of 210 (BODE) Cygni, which star it follows a few seconds of time.

Passy; September 27, 1824; Seven-feet Equatorial.

Position = 46° 45′ *n p* ±	2 Observations,	Dif. = 2° 33′.	
Distance = 55″.098 ±	Single measure.		

The measures are so extremely difficult, that the results are I fear little better than guesses. 210 (Bode) Cygni is in the field; is more easily measured than this star; and, by very cautious estimation, the distance between the two stars of ω^3 Cygni is *less* than that of the two stars of 210 (BODE) Cygni, by six or seven seconds.

Passy; August 31, 1825; Seven-feet Equatorial.

6th and 15th magnitudes.

Position = 49° 5′ *n p*	5 Obs.	Diff. = 0° 55′	Excessively difficult.
Distance = 55″.929	5 Obs.	Diff. = 1″.082	

210 (BODE) Cygni which I have just measured is difficult enough; it is however easy when compared with this. My confidence in the accuracy of these results is but little. Night at present tolerably favourable.

* The star here measured is not IV. 24, in spite of the general agreement of their angles. The descriptions are totally at variance; and in the MS. there is a remark, "My 24th star in class IV. is miscalled; it should be FL. 46^m Cygni (ω^3) *adjacens*, or *ad* 46 *am* Cygni;" ω^3 Cygni is in fact IV. 23. (H).

No. DCCLVI. continued.

Passy; September 1, 1825; Seven-feet Equatorial.

6th and 15th magnitudes.

Position = 48° 58′ *np* | 5 Obs. | Diff. = 1° 17′. Excessively difficult.

Observed with 157; the small star was not visible with 181; measures of distance impracticable.

Mean Result.

(Rejecting the angles observed September 27, 1824,)

Position 49° 1′ *np* (10 Obs.); Epoch 1825.58;

Distance 55″.791 (6 Obs.); Epoch 1825.20.

No. DCCLVII. R. A. 20^h 26^m; Decl. 27° 31′ N.

Nova;

Double; $9\frac{1}{2}$ and 11th magnitudes; small, bluish.

Passy; August 17, 1825; Seven-feet Equatorial.

Position = 32° 2′ *np* | 5 Obs. | Diff. = 3° 31′
Distance = 4″.510 | 5 Obs. | Diff. = 0″.432 } Excessively difficult.

The small star scarcely bears any illumination. Observed on the meridian. Night very fine; stars steady.

Passy; August 20, 1825; Seven-feet Equatorial.

9th and 11th magnitudes.

Position 31° 4′ *np* | 5 Obs. | Diff. = 2° 27′
Distance 4″.426 | 5 Obs. | Diff. = 0″.192 } Excessively difficult.

The small star, which is light blue, bears but the most scanty illumination. Night tolerably favourable for delicate observations.

Mean Result.

Position 31° 33′ *np*; Distance 4″.468; Epoch 1825.63.

No. DCCLVIII. R. A. $20^h\ 27^m$; Decl. 13° 21′ S.

STRUVE, 685; Hist. Cæl. 114.

Double; 10th and 11th magnitudes; extremely faint, and scarcely bear any illumination.

Passy; November 9, 1824; Seven-feet Equatorial.

Position = 71° 33′ *sp* | 5 Obs. | Diff. = 4° 15′ } Excessively difficult.
Distance = 10″.267 | 5 Obs. | Diff. = 0″.721 }

Night unfavourable, and stars 40 minutes west of the meridian.

Passy; November 24, 1824; Seven-feet Equatorial.

9th and 12th magnitudes.

Position = 75° 51′ *sp* | 5 Obs. | Diff. = 6° 32′. Excessively difficult.

No observations of distance can be procured. Night not good, and the observations made, the stars being 1½ hour west of the meridian.

Passy; August 23, 1825; Seven-feet Equatorial.

9th and 10th, or 11th magnitudes.

Position = 74° 2′ *sp* | 5 Obs. | Diff. = 1° 52′ } Excessively difficult.
Distance = 10″.245 | 5 Obs. | Diff. = 0″.529 }

Stars extremely faint, and under a slight illumination become invisible.

Mean Result.

Position 73° 49′ *sp* (15 Obs.); Epoch 1825.13;
Distance 10″.256 (10 Obs.); Epoch 1825.24.

No. DCCLIX. R. A. $20^h\ 28^m$; Decl. 14° 8′ N.

STRUVE, 686; IV. 92.

Triple; A of the 9th, B of the 9¼, and C of the 10th magnitudes.

Measures of A. B.

Passy; October 9, 1824; Seven-feet Equatorial.

Position = 20° 25′ *sf* | 5 Obs. | Diff. = 1° 34′ }
Distance = 25″.272 | 5 Obs. | Diff. = 1″.803 } . . . .

Passy; November 9, 1824; Seven-feet Equatorial.

9th and 9¼ magnitudes.

Position = 19° 31′ *sf* | 5 Obs. | Diff. = 1° 20′ } Very hazy.
Distance = 24″.895 | 5 Obs. | Diff. = 1″.034 }

No. DCCLIX. continued.

Measures of A C.

Passy; October 9, 1824; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 53° 11′ *sp* | 5 Obs. | Diff. = 1° 3′
Distance = 54″.136 | 5 Obs. | Diff. = 1″.082 . . . .

Passy; October 14, 1824; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 52° 40′ *sp* | 5 Obs. | Diff. = 1° 41′
Distance = 54″.203 | 5 Obs. | Diff. = 1″.803 SOUTH.

My friend Mr. TROUGHTON, being on a visit to me at Passy, was so kind as to take the following observation this evening, October 14, 1824.

Distance = 54″.558 | 5 Obs. | Diff. = 3″.294. Mr. TROUGHTON.

Mean Result.

of A B. Position 19° 58′ *sf*; Distance 25″.083; Epoch 1824.81.
of A C. Position 52° 55′ *sp* (10 Obs.); Distance 54″.299 (15 Obs.); Epoch 1824.78.

The position of A B here given differs only 1° 31′ from what it was in 1783, and the distance only 1″.2. (H.)

No. DCCLX. R. A. 20h 34m; Decl. 12° 6′ N.

STRUVE, 690; Hist. Cæl. 106.

Double; equal; each of the 9th magnitude.

Blackman-street; July 13, 1824; Five-feet Equatorial.

Position = 3° 13′ *nf* or *sp* | 5 Obs. | Diff. = 1° 24′
Distance = 9″.096 | 5 Obs. | Diff. = 0″.632 Difficult.

These stars do not bear a good illumination.

Passy; November 6, 1824; Seven-feet Equatorial.

Equal; each of the 10th magnitude.

Position = 2° 47′ *sp* or *nf* | 5 Obs. | Diff. = 1° 37′
Distance = 9″.293 | 5 Obs. | Diff. = 0″.937 Difficult.

Observed when 50 minutes west of the meridian; night very hazy.

Mean Result.

Position 3° 0′ *nf* or *sp*; Distance 9″.194; Epoch 1824.68.

No. DCCLXI. R. A. $20^h\ 37^m$; Decl. 23° 17′ N.

Nova;

Double; 10th and 10½ magnitudes.

Passy; September 1, 1825; Seven-feet Equatorial.

Position = 63° 13′ *n p*	5 Obs.	Diff. = 4° 58′	Excessively difficult.
Distance = 1″.935 ±	1 Obs.	———	

Stars extremely unsteady and ill defined. The results are of doubtful accuracy.

Passy; September 15, 1825; Seven-feet Equatorial.

10th and 10½ magnitudes.

Position = 60° 39′ *n p*	5 Obs.	Diff. = 4° 10′	Excessively difficult.
Distance = 2″.072	5 Obs.	Diff. = 0″.288	

Observed with 181. Stars tolerably steady.

Mean Result.

Position 61° 56′ *n p* (10 Obs.); Distance 2″.049 (6 Obs.); Epoch 1825.69.

No. DCCLXII. R. A. $20^h\ 37^m$; Decl. 30° 4′ N.

52 Cygni; STRUVE, 691; II. 25.

Double; 6th and 10th magnitudes; small, blue.

Passy; October 2, 1824; Seven-feet Equatorial.

Position = 33° 26′ *n f*	5 Obs.	Diff. = 2° 43′	Extremely difficult.
Distance = 7″.127	5 Obs.	Diff. = 0″.601	

Several stars in the field. One double, of the 4th or 5th class, follows 52 Cygni a few seconds of time; but the attempt to measure it has been unsuccessful: it will not bear the slightest illumination. Night very fine.

Passy; August 23, 1825; Seven-feet Equatorial.

8th and 10th, or 11th magnitudes.

Position = 32° 1′ *n f*	6 Obs.	Diff. = 1° 55′	Extremely difficult.
Distance = 7″.278	5 Obs.	Diff. = 0″.432	

Stars on the meridian, and very steady; the small one is light blue, and bears but a very feeble illumination.

No. DCCLXII. continued.

Mean Result.

Position 32° 40′ *nf* (11 Obs.); Distance 7″.202 (10 Obs.); Epoch 1825.19.

In 1781 this star was measured at 31° 3′ *nf*. It therefore appears liable to no change of position. The distance is variously stated at $2\frac{1}{2}$, 3, and 4 diameters, according to atmospheric circumstances, power, &c. (H.)

No. DCCLXIII. R. A. 20^h 38^m; Decl. 18° 51′ S.

STRUVE, 693; Hist. Cæl. 177.

Double; $7\frac{1}{2}$ and 8th magnitudes.

Passy; September 23, 1824; Seven-feet Equatorial.

Position = 25° 23′ *np* | 5 Obs. | Diff. = 1° 3′
Distance = 16″.785 | 5 Obs. | Diff. = 0″.250 } Tolerably steady.

Observed on the meridian.

Passy; November 6, 1824; Seven-feet Equatorial.

$8\frac{1}{2}$ and 9th magnitudes.

Position = 24° 50′ *np* | 5 Obs. | Diff. = 3° 5′
Distance = 16″.713 | 5 Obs. | Diff. = 1″.947 } Rather difficult.

Night very hazy; stars faint.

Mean Result.

Position 25° 6′ *np*; Distance 16″.749; Epoch 1824.78.

No. DCCLXIV. R. A. 20^h 38^m; Decl. 15° 14′ N.

STRUVE, 692; II. 66.

Double; $8\frac{1}{2}$ and 9th magnitudes.

Passy; September 17, 1824; Seven-feet Equatorial.

Position = 83° 47′ *np* | 5 Obs. | Diff. = 2° 4′. Rather difficult.

Passy; September 23, 1824; Seven-feet Equatorial.

9th and 10th magnitudes.

Position 83° 47′ *np* | 5 Obs. | Diff. = 0° 42′. Very difficult.

Night very hazy.

No. DCCLXIV. continued.

Passy; September 29, 1824; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 87° 19′ *np*	5 Obs.	Diff. = 2° 2′	Satisfactory.
Distance = 5″.580	5 Obs.	Diff. = 0″.793	

Observed when 1½ hour west of the meridian; stars most admirably defined, are remarkably steady, and bear a very good illumination. Night unusually fine.

Passy; August 14, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 85° 12′ *np*	5 Obs.	Diff. = 1° 24′	Very difficult.
Distance = 5″.222	5 Obs.	Diff. = 0″.192	
Distance = 4″.760	5 Obs.	Diff. = 0″.649.	Difficult.

Night hazy, but less so when the 2nd set of distances was procured.

Passy; August 16, 1825; Seven-feet Equatorial.

8½ and 9th magnitudes.

Position = 84° 48′ *np*	5 Obs.	Diff. = 1° 28′	Very steady.
Distance = 4″.722	5 Obs.	Diff. = 0″.649	

Stars bear a very good illumination. Night favourable; observations satisfactory.

Passy; August 23, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Distance = 4″.609 | 5 Obs. | Diff. = 0″.456. Tolerably steady.

The distance, 5″.580, taken September 29, 1824, is probably large; still as the observations were made under favourable circumstances, I cannot reconcile myself to their rejection.

Mean Result.

Position 84° 59′ *np* (25 Obs.); Epoch 1825.08;

Distance 4″.979 (25 Obs.); Epoch 1825.40.

In 1783.33 the position was found to be 78° 42′ *np*, so that an angle of + 6° 17′ seems to have been described since that epoch, or + 0°.128 per annum. This star then should be re-examined after an interval of 10 or 20 years, to ascertain whether the presumed motion be real, or not. (H.)

No. DCCLXV. R. A. $20^h\ 40^m$; Decl. 35° 50′ N.

λ Cygni; STRUVE, 696; VI. 32.

Double; 5th and 12th magnitudes.

Passy; September 27, 1824; Seven-feet Equatorial.

Position = 14° 4′ *sf*	5 Obs.	Diff. = 0° 35′	Very difficult.
Distance = 1′ 26″.677	5 Obs.	Diff. = 0″.649	

Small star bears but a very feeble illumination. Night fine.

Passy; November 9, 1824; Seven-feet Equatorial.

5th and 12th magnitudes.

Position = 14° 29′ *sf*	5 Obs.	Diff. = 1° 46	Extremely difficult.
Distance = 1′ 24″.130	5 Obs.	Diff. = 1″.058	

The small star is blue, and bears only the slightest illumination; 1¼ hour west of the meridian when observed.

Passy; August 31, 1825; Seven-feet Equatorial.

5th and 11th, or 12th magnitudes.

Position = 14° 53′ *sf*	5 Obs.	Diff. = 0° 56′	Extremely difficult.
Distance = 1′ 25″.964	5 Obs.	Diff. = 0″.529	

Mean Result.

Position 14° 29′ *sf* (15 Obs.); Distance 1′ 25″.590 (15 Obs.); Epoch 1825.08.

The angle remains within 1° 47′ what it was in 1781. (H.)

No. DCCLXVI. R. A. $20^h\ 42^m$; Decl. 5° 46′ N.

Nova;

Double; 9th and 9¼ magnitudes.

Passy; August 9, 1825; Seven-feet Equatorial.

Position = 69° 24′ *np*	5 Obs.	Diff. = 2° 0′	Difficult.
Distance = 3″.794	5 Obs.	Diff. = 0″.529	

Night hazy; the stars frequently are very indistinct.

Passy; August 12, 1285; Seven-feet Equatorial.

9th and 9¼ magnitudes

Position = 69° 38′ *np*	5 Obs.	Diff. = 1° 30′	Very difficult.
Distance = 4″.202	5 Obs.	Diff. = 0″.288	

Observed on the meridian; stars unsteady.

Mean Result.

Position 69° 31′ *np*; Distance 3″.998; Epoch 1825.61.

No. DCCLXVII. R. A. $20^h\ 43^m$; Decl. 51° 17′ N.

STRUVE, 698; II. 100.

Double; 8th and 11th magnitudes.

Passy; August 20, 1825; Seven-feet Equatorial.

Position = 15° 34′ *nf*	5 Obs.	Diff. = 2° 28′	Excessively difficult.
Distance = 4″.575	5 Obs.	Diff. = 0″.481	

Night very favourable; the small star scarcely bears any illumination. Observed when 35 minutes east of the meridian.

Passy; August 21, 1825; Seven-feet Equatorial.

7th and 11th magnitudes.

Position = 15° 25′ *nf*	6 Obs.	Diff. = 1° 30′	Excessively difficult.
Distance = 4″.907	5 Obs.	Diff. = 0″.360	

The small star is light blue. Observed on the meridian. A small portion of the object-glass not employed, in consequence of the interference of the observatory timbers.

Passy; September 1, 1825; Seven-feet Equatorial.

"th and 11th magnitudes.

Position = 15° 12′ *nf*	5 Obs.	Diff. = 4° 27′	Excessively difficult.
Distance = 3″.744	5 Obs.	Diff. = 0″.312	

A cloudless sky; but the stars are extremely unsteady and ill defined; added to these circumstances, a small portion of the object-glass (perhaps one-eighth) is rendered useless by the unfortunate situation of the timbers of the observatory.

The observations of position agree well enough; but it is otherwise with those of distance. The night of August the 20th was *much more* favourable than either of the nights on which the star was subsequently measured; and as the mean of the distances procured on those nights will differ but little with that obtained on the 20th, if we take the three sets we shall probably not err much when we give as the

Mean Result.

Position 15° 24′ *nf* (16 Obs.); Distance 4″.409 (15 Obs.); Epoch 1825.65.

There appears not the least change of position in these stars, the angle here given differing no more than 0° 27′ from what it was in 1783. (H.)

No. DCCLXVIII. R. A. $20^h\ 44^m$; Decl. $6°\ 40'$ N.

STRUVE, 699; P. XX. 355.

Double; $8\frac{1}{2}$ and 9th magnitudes; and do not bear so good an illumination, as their apparent magnitudes would induce one to expect.

Blackman-street; July 15, 1824; Five-feet Equatorial.

Position $= 54°\ 45'\ sf$ | 5 Obs. | Diff. $= 0°\ 25'$
Distance $= 40''.731$ | 5 Obs. | Diff. $= 0''.537$ . . . .

Observed when one hour east of the meridian.

Same date and Instrument.

8th and $8\frac{1}{2}$ magnitudes.

Position $= 54°\ 43'\ sf$ | 5 Obs. | Diff. $= 1°\ 14'$
Distance $= 40''.466$ | 5 Obs. | Diff. $= 0''.727$ . . . .

Observed when 10 minutes east of the meridian, and was re-measured this evening inadvertently.

Mean Result.

Position $54°\ 44'\ sf$; Distance $40''.598$; Epoch 1824.54.

No. DCCLXIX. R. A. $20^h\ 50^m$; Decl. $15°\ 47'$ N.

Nova;

Double; 8th and $8\frac{1}{2}$ magnitudes.

Passy; August 9, 1825; Seven-feet Equatorial.

Position $= 14°\ 8'\ sp$ | 5 Obs. | Diff. $= 0°\ 46'$
Distance $= 14''.528$ | 5 Obs. | Diff. $= 0''.240$ Rather difficult.

Stars extremely unsteady. Night very unfavourable. A star of the 8th magnitude, at some distance in the field, *sf*.

Passy; August 10, 1825; Seven-feet Equatorial.

$8\frac{1}{2}$ and 9th magnitudes.

Position $= 13°\ 51'\ sp$ | 5 Obs. | Diff $= 1°\ 10'$
Distance $= 15''.198$ | 5 Obs. | Diff. $= 0''.168$ Very difficult.

Small star very faint. Night is become so hazy, that the observations are necessarily concluded: not a cloud visible.

No. DCCLXIX. continued.

Passy; August 12, 1825; Seven-feet Equatorial.

8½ and 9th magnitudes.

Position = 14° 7′ *sp*	5 Obs.	Diff. = 1° 7′	Very difficult.
Distance = 15″.234	5 Obs.	Diff. = 0″.312	

The small star is light blue, and does not bear a very good illumination. Observed on the meridian, but the stars are very unsteady.

Mean Result.

Position 14° 2′ *sp* (15 Obs.); Distance 14″.987 (15 Obs.); Epoch 1825.61.

No. DCCLXX. R. A. 20^h 53^m; Decl. 49° 46′ N.

280 (Bode) Cygni; Struve, 703; I. 97.

Double; 9th and 9¼ magnitudes; small star light blue.

Passy; August 14, 1825; Seven feet Equatorial.

Position = 58° 9′ *nf*	5 Obs.	Diff. = 2° 43′	Extremely difficult.
Distance = 2″.226	5 Obs.	Diff. = 0″.384	

Observed with 181. The night is hazy, and the stars will not bear a higher power.

Passy; August 16, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 60° 13′ *nf*	5 Obs.	Diff. = 3° 11′	Extremely difficult.
Distance = 2″.366	5 Obs.	Diff. = 0″.360	

Stars very steady, but will not bear a deeper power than 181.

Passy; September 1, 1825; Seven-feet Equatorial.

8½ and 9th magnitudes.

Position = 52° 36′ *nf*	5 Obs.	Diff. = 2° 48′	Excessively difficult.
Distance = 2″.743	5 Obs.	Diff. = 0″.432	

Stars very unsteady, and ill defined; I cannot use a higher power than 181, which is inadequate to separate the stars from each other, so much as I could wish.

Passy; September 5, 1825; Seven-feet Equatorial.

8½ and 9th magnitudes.

Position = 53° 2′ *nf*	5 Obs.	Diff. = 2° 43′	Excessively difficult.
Distance = 2″.594	5 Obs.	Diff. = 0″.168	

Stars ill defined, and very unsteady. Night hazy. Observed with 181: a deeper power was tried, but without success.

No. DCCLXX. continued.

Passy: September 28, 1825; Seven-feet Equatorial.

8½ and 9th magnitudes.

Position = 53° 3′ *nf*	5 Obs.	Diff. = 1° 38′	SOUTH.
Distance = 2″.351	5 Obs.	Diff. = 0″.216	
Position = 60° 54′ *nf*	5 Obs.	Diff. = 6° 0′	Capt. BEAUFORT.
Distance = 2″.414	5 Obs.	Diff. = 0″.120	
Position = 62° 3′ *nf*	5 Obs.	Diff. = 15° 22′.	Mons. GAMBART.

The extreme obscurity of the small star precludes M. GAMBART getting any observations of distance.

The measures deemed by all observers, excessively difficult; night tolerably favourable, yet a higher power than 181 cannot be employed.

The discordance between the position of this double star, as determined on different nights, is enormous; a circumstance much to be regretted, as it appears to have undergone a considerable change since Sir W. HERSCHEL's observations.

Mean Result.

Position 57° 9′ *nf* (35 Obs.); Distance 2″.449 (30 Obs.); Epoch 1825.66.

The angle of 1783.73 was 46° 24′ *nf*. Hence it appears that in the interval of 41.93 years no less an arc than — 10° 45′ has been described, giving a mean annual angular motion of — 0°.2564. This star then well merits the attention of future observers. (H.)

No. DCCLXXI. R. A. 20^h 55^m; Decl. 6° 30′ S.

Nova;

Double; 6th and 11th magnitudes; small, pale blue.

Passy; August 31, 1825; Seven-feet Equatorial.

Position = 78° 0′ *sp*	5 Obs.	Diff. = 2° 30′	Extremely difficult.
Distance = 3″.224	5 Obs.	Diff. = 0″.240	

The small star bears but a very feeble illumination. Measures must not be considered standard: the night is become very bad. Observed on the meridian.

No. DCCLXXI. continued.

Passy; September 1, 1825; Seven-feet Equatorial.

6th and 11th magnitudes.

Position = 78° 59′ *sp*	5 Obs.	Diff. = 3° 30′	Excessively difficult.
Distance = 3″.431	5 Obs.	Diff. = 0″.312	

Stars very ill defined, and also unsteady; results therefore deserving but little confidence; indeed I feel so little satisfied with them, that even should they accord with the former observations, I would still prefer another series, taken under more favourable circumstances. On the meridian at the time of observation.

Passy; September 2, 1825; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = 78° 2′ *sp*	5 Obs.	Diff. = 2° 2′	Extremely difficult.
Distance = 3″.027	5 Obs.	Diff. = 0″.336	

Observed on the meridian; stars tolerably steady.

Mean Result.

Position 78° 20′ *sp* (15 Obs.); Distance 3″.227 (15 Obs.); Epoch 1825.67.

No. DCCLXXII. R. A. 20h 56m; Decl. 2° 51′ N.

Nova;

Double; 9th and 12th magnitudes.

Passy; August 20, 1825; Seven-feet Equatorial.

Position = 59° 50′ *sf*	5 Obs.	Diff. = 1° 50′	Excesively difficult.
Distance = 3″.638	5 Obs.	Diff. = 0″.312	

The small star is pale blue, extremely faint, and scarcely bears the least illumination. The results are perhaps a little questionable. Observed when on the meridian; night tolerably favourable.

Passy; August 21, 1825; Seven-feet Equatorial.

9th and 12th magnitudes.

Position = 59° 12′ *sf*	5 Obs.	Diff. = 2° 7′	Excessively difficult.
Distance = 3″.589	5 Obs.	Diff. = 0″.336	

A very slight illumination obliterates the small star. Observations made on the meridian.

Mean Result.

Position 59° 31′ *sf*; Distance 3″.613; Epoch 1825.64.

No. DCCLXXIII. R. A. $20^h\ 57^m$; Decl. 34° 44′ N.

STRUVE, 704; MAYER.

Double; 8th and 9th magnitudes.

Passy; October 2, 1824; Seven-feet Equatorial.

Position = 59° 45′ *n f*	5 Obs.	Diff. = 0° 55′	. . . .
Distance = 1″ 23″.293	5 Obs.	Diff. = 0″.697	

Several stars in the field; some double, of the 4th and 5th classes; but their extreme faintness renders them unmeasurable with this instrument. Night very fine.

Passy; November 9, 1824; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 60° 3′ *n f*	5 Obs.	Diff. = 0° 49′	Difficult.
Distance = 1′ 23″.206	5 Obs.	Diff. = 2″.332	

Night very unfavourable.

Mean Result.

Position 59° 54′ *n f*; Distance 1′ 23″.249; Epoch 1824.80.

No. DCCLXXIV. R. A. $20^h\ 59^m$; Decl. 33° 26′ N.

Nova;

Double; 8th and 9th magnitudes.

Passy; August 9, 1825; Seven-feet Equatorial.

Position = 47° 25′ *s p*	5 Obs.	Diff. = 1° 51′	Difficult.
Distance = 14″.797	1 Obs.	———	

Night is now become so extremely hazy, that no more observations can be procured.

Passy; August 12, 1825; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 46° 53′ *s p*	5 Obs.	Diff. = 1° 55′	Unsteady.
Distance = 14″.229	5 Obs.	Diff. = 0″.673	

Mean Result.

Position 47° 9′ *s p* (10 Obs.); Distance 14″.324 (6 Obs.); Epoch 1825.61.

No. DCCLXXV. R. A. $21^h\ 1^m$; Decl. 29° 29′ N.

STRUVE, 707; II. 97.

Double; 6th and 10th magnitudes; small, blue.

Passy; September 24, 1824; Seven-feet Equatorial.

Position = 46° 51′ *np*	5 Obs.	Diff. = 3° 0′	Very difficult.
Distance = 3″.524	5 Obs.	Diff. = 0″.889	

This star is also double, of the 4th class, an extremely faint star preceding it, at about 70° south. No measures of it can be obtained. The dew is so intolerably troublesome, that I am obliged to discontinue the observations; and I do it with the greatest reluctance, for the night is unusually fine.

Passy; November 6, 1824; Seven-feet Equatorial.

7th and 10th magnitudes.

Position = 44° 34′ *np*	5 Obs.	Diff. = 2° 17′	Extremely difficult.
Distance = 3″.629	5 Obs.	Diff. = 0″.721	

Night unfavourable; observations taken when the stars were 50 minutes west of the meridian.

Mean Result.

Position 45° 12′ *np*; Distance 3″.576; Epoch 1824.70.

The position here assigned, differs only 0° 3′ from Sir W. HERSCHEL's measure in 1783; nor does the distance appear to have sustained any material alteration. (H.)

No. DCCLXXVI. R. A. $21^h\ 2^m$; Decl. 21° 43′ N.

STRUVE, 709; BRADLEY.

Double; 6th and 7th magnitudes.

Blackman-street; July 15, 1824; Five-feet Equatorial.

Position = 31° 59′ *np*	5 Obs.	Diff. = 2° 55′	. . . .
Distance = 17″.663	5 Obs.	Diff. = 1″.105	

Observed when 1 hour east of the meridian.

Passy; November 3, 1824; Seven-feet Equatorial.

6th and 7th magnitudes.

Position = 30° 58′ *np*	5 Obs.	Diff. = 0° 53′	. . . .
Distance = 17″.638	5 Obs.	Diff. = 1″.202	

Stars two hours west of the meridian, at the time of observation.

No. DCCLXXVI. continued.

Passy; August 14, 1825; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 30° 2′ *np* | 5 Obs. | Diff. = 1° 41′
Distance = 17″.999 | 5 Obs. | Diff. = 0″.481 } Unsteady.

Night hazy; the stars occasionally very faint; the small one is bluish.

Passy; September 5, 1825; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 30° 35′ *np* | 5 Obs. | Diff. = 0° 30′
Distance = 17″.054 | 5 Obs. | Diff. = 0″.962 } Very unsteady.

Night extremely hazy.

Passy; September 9, 1825; Seven-feet Equatorial.

8½ and 9th magnitudes.

Distance = 18″.071 | 5 Obs. | Diff. = 1″.010. Tolerably steady.

The night is very hazy, and the small star at times extremely faint.

All the observations of this double star taken this year, 1825, were the result of inadvertence; I was not aware that the star had been observed in 1824.

Mean Result.

Position 30° 53′ *np* (20 Obs.); Epoch 1825.17;
Distance 17″.685 (25 Obs.); Epoch 1825.27.

No. DCCLXXVII. R. A. 21ʰ 2ᵐ; Decl. 61° 26′ N.

STRUVE, 708; 1789.213.

Double; 9th and 9½ magnitudes.

Blackman-street; July 10, 1824; Five-feet Equatorial.

Position = 29° 53′ *np* | 5 Obs. | Diff. = 3° 32′. Extremely difficult.

Observed when 2 hours east of the meridian.

Passy; November 16, 1824; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 35° 37′ *np* | 5 Obs. | Diff. = 0° 23′
Distance = 7″.002 | 5 Obs. | Diff. = 0″.913 } Extremely difficult.

No. DCCLXXVII. continued.

Passy; August 23, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 32° 3′ *np*	5 Obs.	Diff. = 3° 31′	Very difficult.
Distance = 6″.648	5 Obs.	Diff. = 0″.481	

Mean Result.

Position 32° 31′ *np* (15 Obs.); Epoch 1825.01;
Distance 6″.825 (10 Obs.); Epoch 1825.25.

No. DCCLXXVIII. R. A. 21ʰ 2ᵐ; Decl. 8° 50′ N.

Nova;

Double; equal; each 9th or 10th magnitudes; both bluish.

Passy; August 16, 1825; Seven-feet Equatorial.

Position = 6° 1′ *sp* or *nf*	5 Obs.	Diff. = 1° 27′	Excessively difficult.
Distance = 2″.938	5 Obs.	Diff. = 0″.192	

Stars tolerably steady, but are very faint. Night hazy.

Passy; October 7, 1825; Seven-feet Equatorial.

Equal; each of the 10th magnitude.

Position = 5° 45′ *sp* or *nf* | 5 Obs. | Diff. = 1° 58′. Excessively difficult.

Measures of distance impracticable; neither star will bear the least illumination.
Night tolerably favourable.

Passy; October 8, 1825; Seven-feet Equatorial.

Equal; each of the 9th magnitude.

Position = 5° 58′ *sp* or *nf*	5 Obs.	Diff. = 4° 48′	Excessively difficult.
Distance = 3″.236	5 Obs.	Diff. = 0″.120	

Night is become so hazy, that Captain Beaufort cannot procure any observations.

Mean Result.

Position 5° 55′ *sp* or *nf* (15 Obs.); Epoch 1825.75;
Distance 3″.087 (10 Obs.); Epoch 1825.74.

No. DCCLXXIX. R. A. $21^h\ 2^m$; Decl. 38° 1′ N.

STRUVE, 710.

Double; 8th and 10th magnitudes; small, blue.

Passy; October 2, 1824; Seven-feet Equatorial.

Position = 79° 23′ *nf* | 5 Obs. | Diff. = 1° 0′
Distance = 1′ 54″.234 | 5 Obs. | Diff. = 0″.601 } Very difficult.

Several stars in the field; some double of the 3rd and 4th classes; but all too faint for measures.

Passy; November 21, 1824; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 79° 7′ *nf* | 5 Obs. | Diff. = 1° 43′
Distance = 1′ 56″.367 | 5 Obs. | Diff. = 1″.154 } Extremely difficult.

Observed when 70 minutes west of the meridian.

Passy; October 8, 1825; Seven-feet Equatorial.

8th and 11th, or 12th magnitudes.

Distance = 1′ 53″.753 | 5 Obs. | Diff. = 1″.875. Excessively difficult.

Night hazy.

Mean Result.

Position 79° 15′ *nf* (10 Obs.); Epoch 1824.81;
Distance 1′ 54″.785 (15 Obs.); Epoch 1825.13.

No. DCCLXXX. R. A. $21^h\ 2^m$; Decl. 19° 16′ N.

Nova;

Double; equal; each 9th magnitude.

Passy: August 14, 1825; Seven-feet Equatorial.

Position = 57° 14′ *nf* or *sp* | 5 Obs. | Diff. = 4° 21′
Distance = 3″.419 | 5 Obs. | Diff. = 0″.360 } Difficult.

Night very hazy, and stars unsteady.

Passy; September 5, 1825; Seven-feet Equatorial.

Equal; each of the 9th magnitude.

Position = 59° 8′ *nf* or *sp* | 5 Obs. | Diff. = 1° 23′
Distance = 2″.748 | 5 Obs. | Diff. = 0″.312 } Very difficult.

Night hazy; stars unsteady, and bear but a very feeble illumination.

No. DCCLXXX. continued.

Passy; September 15, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 58° 39′ *nf* | 5 Obs. | Diff. = 2° 34′ } Very difficult.
Distance = 2″.634 | 5 Obs. | Diff. = 0″.505 }

Stars very steady, but neither of them will bear a good illumination.

Mean Result.

Position 58° 20′ *nf* or *sp* (15 Obs.); Distance 2″.933 (15 Obs.); Epoch 1825.67.

No. DCCLXXXI. R. A. 21ʰ 4ᵐ; Decl. 6° 28′ N.

19 (Bode) Equulei; Struve, 712.

Double; 6½ and 7th magnitudes.

Blackman-street; July 13, 1824; Five-feet Equatorial.

Position = 82° 44′ *np* | 5 Obs. | Diff. = 0° 21′ } Satisfactory.
Distance = 3′ 4″.130 | 5 Obs. | Diff. = 1″.389 }

Observed by morning twilight, without artificial illumination.

Passy; October 23, 1824; Seven-feet Equatorial.

6½ and 7th magnitudes.

Position = 83° 12′ *np* | 5 Obs. | Diff. = 0° 25′ } . . . .
Distance = 3′ 2″.809 | 5 Obs. | Diff. = 1″.082 }

Passy; August 23, 1825; Seven-feet Equatorial.

7th and 7½ magnitudes.

Distance = 3′ 2″.783 | 5 Obs. | Diff. = 0″.408. Very steady.

Mean Result.

Position 82° 58′ *np* (10 Obs.); Epoch 1824.77;
Distance 3′ 3″.241 (15 Obs); Epoch 1824.99.

No. DCCLXXXII. R. A. $21^h\ 6^m$; Decl. 9° 17′ N.

δ Equulei; STRUVE, 715; IV. 37.

Double; 5th and 15th, or 20th magnitudes; I have often looked for the small star in ENGLAND, but could never detect it.

Passy; October 2, 1824; Seven-feet Equatorial.

Position = 47° 34′ *nf*	5 Obs.	Diff. = 1° 45′	Excessively difficult.
Distance = 25″.492	5 Obs.	Diff. = 2″.452	

The small star is so extremely faint, that it cannot be seen even in the *unilluminated* field, without great attention. The observations were made with 105; and although the night is unusually favourable for delicate determinations, yet the measures here given must be received with some suspicion.

Passy; October 12, 1825; Seven-feet Equatorial.

5th and 15th, or 20th magnitudes.

Position = 48° 18′ *nf*	10 Obs.	Diff. = 4° 20′	Excessively difficult.
Distance = 26″.775	7 Obs.	Diff. = 0″.769	

Observed on the meridian with 157. Night very fine; the accuracy of the results is perhaps questionable.

Mean Result.

Position 48° 3′ *nf* (15 Obs.); Distance 26″.240 (12 Obs.); Epoch 1825.26.

This star appears to have sustained a very extraordinary change both in distance and position. Sir W. HERSCHEL's measures are as follows:—1781.80 (Oct. 22) Pos. 11° 39′ *nf*, Dist. 19″.533. Thus in 43.46 years no less an arc than — 36° 24′ has been described, being at the rate of — 0°.838 per annum, and a change of distance to the amount of + 6″.707, or + 0″.154 per annum.

An observation in a 20-feet sweep in 1785 confirms the fact of the angle made by the two stars being then small. "δ Equulei, double, very unequal, a few degrees *nf*. *S.r.*"

No. DCCLXXXII. continued.

The star is a remarkable one; and from its magnitude and situation in the heavens, not to be confounded with any other.

The proper motions assigned to this star in PIAZZI's Catalogue, account satisfactorily for the change observed. They are respectively + 0″.08 in R. A. and — 0″.29 in declination. These motions, in 44 years, would carry the large star 3″.5 to the following, and 12″.8 to the south side of its place in 1781, or, in a direction, making an angle of 74° *sf* with the parallel. Supposing then the small star fixed, the present angle of position and distance should be 47° *nf* and 22″.5 instead of 48° 3′ and 26″.24 which observation makes them. If we consider the uncertainty which necessarily hangs about the earlier distance, depending as it does on a single measure, and from the extreme minuteness of the small star, liable easily to an error of 2 or 3″, it will be allowed that a more satisfactory verification of the proper motion of the one star, and the comparative fixity of the other, could hardly have been looked for. This, among other similar instances, will serve to show the advantage which may be taken of the measures of double stars in all researches relating to the proper motions of the stars. This star appears to be a fit object for the investigation of parallax. (H.)

No. DCCLXXXIII. R. A. $21^h\ 7^m$; Decl. 8° 23′ S.
STRUVE, 716; Hist. Cæl. 197.
Double; 9th and 9½ magnitudes.

Passy; September 23, 1824; Seven-feet Equatorial.
Distance = 5″.167 | 5 Obs. | Diff. = 0″.889. Extremely difficult.
These stars scarcely bear any illumination.

No. DCCLXXXIII. continued.

Passy; November 21, 1824; Seven-feet Equatorial.

9½ and 10th magnitudes.

Position = 82° 38′ *sf*	5 Obs.	Diff. = 1° 32′	Extremely difficult.
Distance = 4″.801	5 Obs.	Diff. = 0″.817	

Observed when 50 minutes west of the meridian; the stars become invisible under a very slight illumination.

Passy; September 2, 1825; Seven-feet Equatorial.

9½ and 10th magnitudes.

Position = 82° 6′ *sf*	5 Obs.	Diff. = 3° 15′	Very steady.
Distance = 4″.542	5 Obs.	Diff. = 0″.577	

These stars bear neither illumination, nor magnifying power; and although the night is very fine, the results are a little suspicious.

Mean Result.

Position 82° 22′ *sf* (10 Obs.); Epoch 1825.28;
Distance 4″.837; (15 Obs.); Epoch 1825.10.

No. DCCLXXXIV. R. A. 21ʰ 11ᵐ; Decl. 8° 48′ N.

Nova;

Double; 9th and 10th, or 11th magnitudes.

Passy; September 15, 1825; Seven-feet Equatorial.

Position = 84° 50′ *sp*	5 Obs.	Diff. = 1° 20′	Excessively difficult.
Distance = 2″.394	5 Obs.	Diff. = 0″.240	

Stars steady, but the small one bears only the most feeble illumination.

Passy; October 8, 1825; Seven-feet Equatorial.

10th and 11th magnitudes.

Position = 84° 13′ *sp*	5 Obs.	Diff. = 2° 0′	South.
Distance = 2″.851	5 Obs.	Diff. = 0″.168	
Position = 85° 35′ *sp*	5 Obs.	Diff. = 2° 50′	Capt. Beaufort.
Distance = 2″.890	5 Obs.	Diff. = 0″.240	

Observations considered excessively difficult, by both observers.

Mean Result.

Position 84° 53′ *sp* (15 Obs.); Distance 2″.642 (15 Obs.);
Epoch 1825.74.

No. DCCLXXXV. R. A. $21^h\ 13'$; Decl. $52°\ 15'$ N.

STRUVE, 718.

Double; equal; each of the 9th magnitude.

Blackman-street; July 10, 1824; Five-feet Equatorial.

Position = 27° 23′ *s f* or *n p*	5 Obs.	Diff. = 3° 30′	Rather difficult.
Distance = 6″.818	5 Obs.	Diff. = 0″.885	

The star 1¼ hour east of the meridian, when the observations of it were procured.

Passy; August 23, 1825; Seven-feet Equatorial.

Equal; each 9½ magnitude.

Position = 25° 43′ *s f* or *n p*	5 Obs.	Diff. = 2° 10′	Difficult.
Distance = 6″.465	5 Obs.	Diff. = 0″.745	

The measures of this double star would be very easy, but for the unfortunate interference of the observatory timbers.

Mean Result.

Position 26° 33′ *s f* or *n p*; Distance 6″.641; Epoch 1825.08.

No. DCCLXXXVI. R. A. $21^h\ 13^m$; Decl. $52°\ 19'$ N.

327 (BODE) Cygni; H. C. 301; STRUVE, 717.

Double; 7th and 11th magnitudes.

Blackman-street; July 10, 1824; Five-feet Equatorial.

Position = 32° 8′ *n p*	5 Obs.	Diff. = 1° 43′	Extremely difficult.
Distance = 49″.580	5 Obs.	Diff. = 0″.727	

The small star is decidedly blue, and bears but the slightest illumination.

Observed when 1¾ hour east of the meridian.

Passy; September 2, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 32° 36′ *n p*	5 Obs.	Diff. = 1° 21′	Very difficult.
Distance = 48″.111	5 Obs.	Diff. = 0″.505	

Stars remarkably steady; observations satisfactory.

Passy; September 4, 1825; Seven-feet Equatorial.

8th and 11th, or 12th magnitudes.

Distance = 48″.526 | 5 Obs. | Diff. = 0″.793. Extremely difficult.

Mean Result.

Position 32° 22′ *n p* (10 Obs.); Epoch 1824.61;

Distance 48″.739 (15 Obs.); Epoch 1824.97.

No. DCCLXXXVII. R. A. $21^h\ 14^m$; Decl. 19° 3′ N.

1 Pegasi; STRUVE, 719; V. 20.

Double; 5th and 9th magnitudes; small, blue, and bears a very tolerable illumination.

Passy; September 17, 1824; Seven-feet Equatorial.

Position = 38° 52′ *n p* | 5 Obs. | Diff. = 2° 54′
Distance = 37″.550 | 5 Obs. | Diff. = 0″.841 . . . .

Passy; November 9, 1824; Seven-feet Equatorial.

5th and 10th magnitudes.

Position = 40° 14′ *n p* | 5 Obs. | Diff. = 1° 44′
Distance = 36″.066 | 5 Obs. | Diff. = 1″.058 } Very difficult.

Night very unfavourable.

Passy; August 31, 1825; Seven-feet Equatorial.

5th and 11th, or 12th magnitudes.

Position = 40° 40′ *n p* | 5 Obs. | Diff. = 1° 3′
Distance = 36″.837 | 5 Obs. | Diff. = 1″.010 } Excessively difficult.

Passy; September 1, 1825; Seven-feet Equatorial.

5th and 11th magnitudes.

Position = 40° 58′ *n p* | 5 Obs. | Diff. = 0° 50′
Distance = 36″.991 | 5 Obs. | Diff. = 1″.443 } Excessively difficult.

Night cloudless; but the stars are ill defined, and are extremely unsteady.

Mean Result.

Position 40° 11′ *n p* (20 Obs.); Distance 36″.861 (20 Obs.); Epoch 1825.22.

In 1781 the position was 38° 19′ *n p*; the distance 40″.750 "pretty exact." The distance is too large to be fully relied on; but the agreement of positions within 2° shows that the star has undergone no notable change. (H.)

No. DCCLXXXVIII. R. A. $21^h\ 14'$; Decl. $7°\ 20'$ S.

STRUVE, 720; Hist. Cæl. 197.

Double; 7th and $7\frac{1}{2}$ magnitudes.

Passy; September 23, 1824; Seven-feet Equatorial.

Position $= 6°\ 42'\ nf$	5 Obs.	Diff. $= 0°\ 30'$	. . . .
Distance $= 36''.578$	5 Obs.	Diff. $= 0''.769$	

Passy; November 6, 1824; Seven-feet Equatorial.

8½ and 9th magnitudes.

Position $= 6°\ 19'\ nf$	5 Obs.	Diff. $= 1°\ 16'$	Difficult.
Distance $= 36''.991$	5 Obs.	Diff. $= 1''.803$	

Stars faint. Night very foggy.

Mean Result.

Position $6°\ 30'\ nf$; Distance $36''.784$; Epoch 1824.78.

No. DCCLXXXIX. R. A. $21^h\ 18^m$; Decl. $12°\ 56'$ N.

Nova;

Double; 8th and 10th magnitudes; small star is pale blue, and bears scarcely any illumination.

Passy; August 21, 1825; Seven-feet Equatorial.

Position $= 55°\ 42'\ sp$	5 Obs.	Diff. $= 4°\ 10'$	Excessively difficult.
Distance $= 3''.431$	6 Obs.	Diff. $= 0''.601$	

Observed on the meridian.

Passy; September 15, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position $= 57°\ 16'\ sp$	5 Obs.	Diff. $= 1°\ 0'$	Excessively difficult.
Distance $= 3''.539$	5 Obs.	Diff. $= 0''.120$	

The small star is light blue, and bears hardly any illumination. Night tolerably favourable.

Mean Result.

Position $56°\ 29'\ sp$ (10 Obs.); Distance $3''.480$ (11 Obs.); Epoch 1825.67.

No. DCCXC. R. A. $21^h\ 18^m$; Decl. 35° 38′ N.

69 Cygni; STRUVE, 722; V. 44.

Double; 6th and 12th magnitudes.

Passy; October 2, 1824; Seven-feet Equatorial.

Position = 11° 40′ *sp* | 5 Obs. | Diff. = 0° 32′ } Excessively difficult.
Distance = 40″.504 | 5 Obs. | Diff. = 1″.899 }

Night very favourable.

Passy; November 21, 1824; Seven-feet Equatorial.

6th and 12th, or 15th magnitudes.

Position = 11° 57′ *sp* | 5 Obs. | Diff. = 1° 44′. Excessively difficult.

Observations of distance cannot be procured.

Passy; October 12, 1825; Seven-feet Equatorial.

8th and 12th, or 13th magnitudes.

Position = 10° 30′ *sp* | 5 Obs. | Diff. = 1° 5′ } Excessively difficult.
Distance = 40″.107 | 5 Obs. | Diff. = 0″.889 }

Observed on the meridian with 157. Night fine.

Mean Result.

Position 11° 22′ *sp* (15 Obs.); Epoch 1825.14;
Distance 40″.305 (10 Obs.); Epoch 1825.27.

Sir W. HERSCHEL gives no measures of this star. (H.)

No. DCCXCI. R. A. $21^h\ 20^m$; Decl. 10° 19′ N.

Nova;

Double; $8\frac{1}{2}$ and 9th magnitudes.

Passy; August 31, 1825; Seven-feet Equatorial.

Position = 67° 6′ *sp* | 5 Obs. | Diff. = 2° 42′ } Excessively difficult.
Distance = 1″.460± | 1 Obs. | ——— }

Observed with 327, which is not sufficient to separate the stars sufficiently from each other. Night is suddenly become very bad, and these measures must only be regarded as approximations.

No. DCCXCI. continued.

Passy; September 10, 1825; Seven-feet Equatorial.

8½ and 9th magnitudes.

Position = 69° 4′ *sf*	5 Obs.	Diff. = 3° 28′	Excessively difficult.
Distance = 1″.142 ±	5 Obs.	Diff. = 0″.240	

These stars are of a bluish colour, and neither bear a good illumination, nor a high magnifying power. Observed with 327, which is more than they well bear: 181 does not separate their discs, although the night is hazy. The results are probably a little suspicious.

Mean Result.

Position 68° 5′ *np* or *sf* (10 Obs.); Distance 1″.195 ± (6 Obs.); Epoch 1825.68.

No. DCCXCII. R. A. 21h 24m; Decl. 33° 2′ N.

Nova;

Double; equal; each of the 9½ magnitude.

Passy; August 20, 1825; Seven-feet Equatorial.

Position = 79° 21′ *sp* or *nf*	6 Obs.	Diff. = 1° 15′	Extremely difficult.
Distance = 4″.474	5 Obs.	Diff. = 0″.432	

Stars steady; night tolerably favourable.

Passy; September 4, 1825; Seven-feet Equatorial.

10th and 10½ magnitudes.

Position = 79° 26′ *nf*	5 Obs.	Diff. = 3° 24′	Extremely difficult.
Distance = 4″.169	5 Obs.	Diff. = 0″.456	

Observed on the meridian; night very hazy.

Mean Result.

Position 79° 23′ *sp* or *nf* (11 Obs.); Distance 4″.321 (10 Obs.); Epoch 1825.65.

No. DCCXCIII. R. A. 21h 25m; Decl. 19° 56′ N.

Nova;

Double; 9th and 9½ magnitudes.

Passy; August 21, 1825; Seven-feet Equatorial.

Position = 40° 57′ *np*	5 Obs.	Diff. = 2° 14′.	Very difficult.

Observed on the meridian.

No. DCCXCIII. continued.

Passy; September 5, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 41° 48′ *np*	5 Obs.	Diff. = 1° 20′	Very difficult.
Distance = 2″.579	5 Obs.	Diff. = 0″.120	

Night hazy; stars on the meridian, but unsteady.

Passy; October 11, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 42° 14′ *np*	5 Obs.	Diff. = 2° 2′	Excessively difficult.
Distance = 2″.582	5 Obs.	Diff. = 0″.168	

Both stars are bluish, and bear scarcely any illumination. Night foggy.

Mean Result.

Position 41° 40′ *np* (15 Obs.); Epoch 1825.70;

Distance 2″.580 (10 Obs.); Epoch 1825.73.

No. DCCXCIV. R. A. 21ʰ 31ᵐ; Decl. 35° 35′ N.

Nova;

Double; 9th and 12th, or 15th magnitudes.

Passy; September 2, 1825; Seven-feet Equatorial.

Position = 71° 51′ *sf*	5 Obs.	Diff. = 3° 15′	Excessively difficult.
Distance = 8″.139	5 Obs.	Diff. = 0″.673	

The small star is so extremely faint, that it cannot be seen without great attention; the observations are perhaps a little inaccurate; but the night is very fine, and the stars are very steady.

Passy; September 5, 1825; Seven-feet Equatorial.

9½ and 12th, or 13th magnitudes.

Position = 72° 15′ *sf*	5 Obs.	Diff. = 3° 15′	Excessively difficult.
Distance = 8″.206	5 Obs.	Diff. = 1″.683	

The small star is only visible by glimpses. Results of suspicious accuracy.

Mean Result.

Position 72° 3′ *sf*; Distance 8″.172; Epoch 1825.68.

No. DCCXCV. R. A. $21^h\ 33^m$; Decl. 56° 41′ N.

STRUVE, 728; P. XXI. 248; III. 71.

Triple; A 7th, B 9½, and C of the 9th magnitudes.

Measures of A B.

Passy; October 4, 1824; Seven-feet Equatorial.

Position = 32° 12′ *sf*	5 Obs.	Diff. = 1° 25′	. . . .
Distance = 12″.221	5 Obs.	Diff. = 0″.168	

Passy; November 16, 1824; Seven-feet Equatorial.

7th and 10th magnitudes.

Position = 30° 54′ *sf*	5 Obs.	Diff. = 1° 24′	Difficult.
Distance = 11″.699	5 Obs.	Diff. = 0″.889	

Measures of A C.

Passy; October 4, 1824; Seven-feet Equatorial.

7th and 9th magnitudes.

Position = 68° 35′ *np*	5 Obs.	Diff. = 1° 20′	. . . .
Distance = 19″.233	5 Obs.	Diff. = 1″.058	

Passy; November 16, 1824; Seven-feet Equatorial.

7th and 9th magnitudes.

Position = 69° 32′ *np*	5 Obs.	Diff. = 1° 48′	. . . .
Distance = 19″.543	5 Obs.	Diff. = 1″.058	

Mean Result.

of A. B. Position 31° 33′ *sf*; Distance 11″.945;

of A C. Position 69° 3′ *np*; Distance 19″.388;

Epoch 1824.81.

These measures compared with those of 1783 give a change of — 3° 51′ in angle and + 0″.3 in distance for the nearer star B, and — 4° 54′ and + 0″.77 for the more distant one C. If these changes arise from real motions, and be not merely errors of observation, they cannot be accounted for by supposing the stars B and C at rest, and the central star A only in motion. (H.)

No. DCCXCVI. R. A. $21^h\ 34^m$; Decl. 39° 59′ N.

76 Cygni; STRUVE, 730; V. 43.

Double; 6th and 10th magnitudes.

Passy; September 29, 1824; Seven-feet Equatorial.

Position = 40° 59′ *s p* | 5 Obs. | Diff. = 1° 0′ } Difficult.
Distance = 1″.624 | 5 Obs. | Diff. = 0″.841 }

Small star very faint.

Passy; November 21, 1824; Seven-feet Equatorial.

7th and 10th magnitudes.

Position = 40° 45′ *s p* | 5 Obs. | Diff. = 1° 35′ } Very difficult.
Distance = 1″.667 | 5 Obs. | Diff. = 0″.745 }

The small star bears but a very slight illumination.

Mean Result.

Position 40° 52′ *s p*; Distance 1″.645; Epoch 1824.82.

Sir W. HERSCHEL has no measures of this star. (H.)

No. DCCXCVII. R. A. $21^h\ 35^m$; Decl. 56° 46′ N.

STRUVE, 729; P. XXI. 256; III. 72.

Double; 8th and 9th magnitudes.

Passy; October 4, 1824; Seven-feet Equatorial.

Position = 33° 1′ *n f* | 5 Obs. | Diff. = 2° 20′ } Difficult.
Distance = 12″.154 | 5 Obs. | Diff. = 0″.408 }

Passy; November 16, 1824; Seven-feet Equatorial.

10th and 11th magnitudes.

Position = 34° 9′ *n f* | 5 Obs. | Diff. = 1° 43′. Excessively difficult.

Night very hazy.

Passy; October 11, 1825; Seven-feet Equatorial.

10th and 11th magnitudes.

Distance = 12″.147 | 5 Obs. | Diff. = 0″.673. Extremely difficult.

The small star very indistinct. Night foggy.

Mean Result.

Position 33° 35′ *n f* (10 Obs.); Epoch 1824.81;
Distance 12″.150 (10 Obs.); Epoch 1825.27.

The angle in 1783 was 31° 35′. The distance 13″.11 according to Sir W. HERSCHEL's measures. (H.)

No. DCCXCVIII. R. A. $21^h\ 35^m$; Decl. 9° 3′ N.

ε Pegasi; STRUVE, 731; VI. 103.

Double; 3rd and 10th, or 12th magnitudes; small, blue.

Blackman-street; July 15, 1824; Five-feet Equatorial.

Position = 52° 41′ *n p* | 5 Obs. | Diff. = 1° 14. Excessively difficult.

Passy; November 6, 1824; Seven-feet Equatorial.

3rd and 10th magnitudes.

Position = 53° 0′ *n p* | 5 Obs. | Diff. = 0° 44′
Distance = 2′ 18″.805 | 5 Obs. | Diff. = 2″.404 } Extremely difficult.

Passy; October 12, 1825; Seven-feet Equatorial.

3rd and 10th magnitudes.

Position = 53° 15′ *n p* | 5 Obs. | Diff. = 1° 12′
Distance = 2′ 18″.223 | 5 Obs. | Diff. = 0″.962 } Very difficult.

Observed on the meridian with 157. Night very fine.

Mean Result.

Position 52° 59′ *n p* (15 Obs.); Epoch 1825.05;

Distance 2′ 18″.514 (10 Obs.); Epoch 1825.81.

Comparing the angle of position here assigned with that given by Sir W. HERSCHEL in 1783, we find a difference of only 14′. The distances indeed differ enormously, no less than 47″, but this has already been sufficiently spoken of elsewhere. (H.)

No. DCCXCIX. R. A. $21^h\ 36^m$; Decl. 37° 29′ N.

79 Cygni; STRUVE, 732; VI. 57.

Double; 5th and 7th magnitudes.

Blackman-street; July 10, 1824; Five-feet Equatorial.

Position = 30° 36′ *n f* | 5 Obs. | Diff. = 0° 24′
Distance = 2′ 33″.025 | 5 Obs. | Diff. = 1″.579 } . . . .

North preceding the brighter star A, and perhaps a little nearer to it than B, is a star C of the 12th or 15th magnitudes: and in the lower part of the field is a double star of the 4th class; equal; each of the same magnitude as the star C.

Position = 30° ± *s p* or *n f*, and distance = 40″.0 ±.

Measures little else than cautious estimations.

No. DCCXCIX. continued.

Passy; November 9, 1824; Seven-feet Equatorial.

5th and 7th magnitudes.

Position = 30° 42′ *nf* | 5 Obs. | Diff. = 0° 5′
Distance = 2′ 33″.325 | 5 Obs. | Diff. = 0″.625 } Hazy.

Observed when 1ʰ 20′ west of the meridian; night unfavourable; no measures of A C can be obtained.

Measures of A C.

Blackman-street; July 10, 1824; Five-feet Equatorial.

5th and 12th, or 15th magnitudes.

Position = 50° 8′ *np* | 2 Obs. | Diff. = 0° 45′. Excessively difficult.

The extreme faintness of the small star renders observations of distance impracticable; but I consider it less than that of A B.

Mean Result.

of A B. Position 30° 39′ *nf*; Distance 2′ 33″.170;
Epoch 1824.68.

of A C. Position 50° 8′ *np*; Distance about 2½ minutes;
Epoch 1824.53.

Sir W. HERSCHEL has no measures of this star. (H.)

No. DCCC. R. A. 21ʰ 49ᵐ; Decl. 61° 45′ N.

STRUVE, 734; 1789. 213.

Triple; A 6½, B 7th, and C of the 12th magnitudes.

Measures of A B.

Blackman-street; July 11, 1824; Five-feet Equatorial.

Position = 55° 4′ *sf* | 5 Obs. | Diff. = 0° 59′
Distance = 1′ 2″.826 | 5 Obs. | Diff. = 0″.659 } Very steady.

Three hours and a half east of the meridian, at the time of observation; of A C no measures can be obtained.

Note; There are two sets of triple stars in the field; the stars here measured are the two brightest.

Passy; November 16, 1824; Seven-feet Equatorial.

Triple; but the 3rd star will not bear the least illumination.

Position = 55° 39′ *sf* | 5 Obs. | Diff. = 0° 46′
Distance = 1′ 2″.847 | 5 Obs. | Diff. = 0″.817 } . . . .

Mean Result.

of A B. Position 55° 21′ *sf*; Distance 1′ 2″.836; Epoch 1824.70.

No. DCCCI. R. A. $21^h\ 52^m$; Decl. 12° 51′ S.

STRUVE, 737; Hist. Cæl. 571.

Double; 9th and 10th magnitudes.

Passy; September 27, 1824; Seven-feet Equatorial.

Position = 29° 6′ *sf*	5 Obs.	Diff. = 0° 35′	Very difficult.
Distance = 20″.810	5 Obs.	Diff. = 1″.178	

These stars bear but the most feeble illumination. Night tolerably good.

Passy; November 9, 1824; Seven-feet Equatorial.

9½ and 10th magnitudes.

Position = 31° 2′ *sf*	5 Obs.	Diff. = 1° 31′	Very difficult.
Distance = 20″.096	5 Obs.	Diff. = 0″.817	

Mean Result.

Position 30° 4′ *sf*; Distance 20″.453; Epoch 1824.79.

No. DCCCII. R. A. $21^h\ 53^m$; Decl. 17° 49′ S.

29 Aquarii; STRUVE, 738.

Double; 8th and 8½ magnitudes.

Blackman-street; July 12, 1824: Five-feet Equatorial.

Position = 27° 23′ *sp*	5 Obs.	Diff. = 1° 30′	. . . .
Distance = 4″.317	5 Obs.	Diff. = 0″.316	

Passy; November 3, 1824; Seven-feet Equatorial.

7½ and 8th magnitudes.

Position = 25° 53′ *sp*	5 Obs.	Diff. = 2° 21′	Very unsteady.
Distance = 4″.424	5 Obs.	Diff. = 0″.889	

Observed when 50 minutes west of the meridian.

Mean Result.

Position 26° 38′ *sp*; Distance 4″.370; Epoch 1824.68.

No. DCCCIII. R. A. $21^h\ 57^m$; Decl. 12° 48′ N.

Nova;

Double; equal; each 9th magnitude.

Passy; August 20, 1825; Seven-feet Equatorial.

Position = 6° 24′ *sp* or *nf* | 5 Obs. | Diff. = 1° 35′
Distance = 3″.244 | 5 Obs. | Diff. = 0″.408
} Rather difficult.

Stars steady; night tolerably favourable.

Passy; September 4, 1825; Seven-feet Equatorial.

Equal; each of the 9½ magnitude.

Position = 7° 55′ *sp* or *nf* | 5 Obs. | Diff. = 2° 9′
Distance = 3″.332 | 5 Obs. | Diff. = 0″.408
} Very difficult.

Night hazy; stars at times very faint.

Mean Result.

Position 7° 9′ *sp* or *nf*; Distance 3″.288; Epoch 1825.65.

No. DCCCIV. R. A. $22^h\ 0^m$; Decl. 69° 20′ N.

STRUVE, 740; 1789. 218.

Double; 9½ and 10th magnitudes.

Passy; October 4, 1824; Seven-feet Equatorial.

Position = 83° 50′ *sf* | 5 Obs. | Diff. = 0° 48′ Extremely difficult.

The small star scarcely bears any illumination.

Passy; October 12, 1825; Seven-feet Equatorial.

10th and 11th magnitudes.

Position = 83° 36′ *sf* | 5 Obs. | Diff. = 0° 55′
Distance = 16″.434 | 5 Obs. | Diff. = 0″.456
} Extremely difficult.

Observed with 157. Night favourable.

Passy; October 13, 1825; Seven-feet Equatorial.

10th and 11th magnitudes.

Distance = 16″.778 | 5 Obs. | Diff. = 0″.553. Excessively difficult.

Neither star will bear a good illumination. Observed with 157.

Mean Result.

Position 83° 43′ *sf* (15 Obs.); Epoch 1825.27;
Distance 16″.606 (10 Obs.); Epoch 1825.78.

No. DCCCV. R. A. $22^h\ 0^m$; Decl. 36° 45′ N.

Nova;

Double; $8\frac{1}{2}$ and 10th magnitudes.

Passy; September 17, 1824; Seven-feet Equatorial.

Position = 23° 43′ *nf* | 5 Obs. | Diff. = 4° 0′. Very difficult.

The small star bears but a very feeble illumination.

Passy; September 29, 1824; Seven-feet Equatorial.

8th and 12th, or 15th magnitudes.

Position = 22° 5′ *nf* | 5 Obs. | Diff. = 1° 57′
Distance = 13″.097 | 5 Obs. | Diff. = 0″.505 } Extremely difficult.

Passy; November 3, 1824; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 22° 13′ *nf* | 5 Obs. | Diff. = 3° 33′
Distance = 12″.349 | 5 Obs. | Diff. = 0″.986 } Extremely difficult.

Passy; September 9, 1825; Seven-feet Equatorial.

9th and 11th magnitudes.

Position = 22° 39′ *nf* | 5 Obs. | Diff. = 1° 44′
Distance = 12″.877 | 5 Obs. | Diff. = 1″.178 } Extremely difficult.

Mean Result.

Position 22° 40′ *nf* (20 Obs.); Epoch 1825.00;
Distance 12″.774 (15 Obs.); Epoch 1825.09.

No. DCCCVI. R. A. $22^h\ 4^m$; Decl. 81° 58′ N.

180 (Bode) Cephei; Struve, 748.

Double; $7\frac{1}{2}$ and 8th magnitudes.

Blackman-street; July 13, 1824; Five-feet Equatorial.

Position = 12° 36′ *nf* | 5 Obs. | Diff. = 0° 53′
Distance = 13″.063 | 5 Obs. | Diff. = 1″.579 } By twilight.

The morning is so far advanced, that artificial illumination of the micrometer wires is unnecessary. Stars steady.

Passy; October 23, 1824; Seven-feet Equatorial.

7th and $7\frac{1}{2}$ magnitudes.

Position = 11° 26′ *nf* | 5 Obs. | Diff. = 1° 2′
Distance = 14″.071 | 5 Obs. | Diff. = 1″.539 } On the meridian.

No. DCCCVI. continued.

Passy; September 10, 1825; Seven-feet Equatorial.

7½ and 8th magnitudes.

Position = 12° 21′ *nf*	5 Obs.	Diff. = 1° 29′	Satisfactory.
Distance = 13″.568	3 Obs.	Diff. = 0″.649	

Night hazy; but the stars are steady.

Mean Result.

Position 12° 8′ *nf* (15 Obs.); Distance 13″.567 (15 Obs.); Epoch 1825.02.

No. DCCCVII. R. A. 22ʰ 6ᵐ; Decl. 28° 41′ N.

Nova;

Double; 9th and 9½ magnitudes.

Passy; September 2, 1825; Seven-feet Equatorial.

Position = 19° 37′ *sf*	6 Obs.	Diff. = 3° 50′	Very difficult.
Distance = 2″.041	5 Obs.	Diff. = 0″.240	

Observed with 327, a power just sufficient to separate distinctly the two stars from each other; but it is unfortunately rather a higher power than the stars well bear, although they are very steady, are on the meridian, and the night is favourable.

Passy; September 5, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 22° 43′ *sf*	5 Obs.	Diff. = 1° 12′	Extremely difficult.
Distance = 1″.719	5 Obs.	Diff. = 0″.312	

I attempted to observe this double star with 181, but could not succeed; the measures were procured with 327, which is a power greater than the stars well bear. The stars are unsteady, and the night is hazy.

Passy; September 14, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 21° 45′ *sf*	5 Obs.	Diff. = 3° 16′	Excessively difficult.
Distance = 1″.508	3 Obs.	Diff. = 0″.288	

The haze is become so considerable, that the stars are no longer visible.

Mean Result.

Position 21° 15′ *sf* (16 Obs.); Distance 1″.794 (13 Obs.); Epoch 1825.70.

No. DCCCVIII. R. A. $22^h\ 16^m$; Decl. 21° 5′ S.

Nova;

Double; 8th and 11th magnitudes.

Passy; October 20, 1825; Seven-feet Equatorial.

Position = 64° 35′ *sf*	10 Obs.	Diff. = 4° 10′	Excessively difficult.
Distance = 6″.457	5 Obs.	Diff. = 0″.288	

Observed when 1¼ hour west of the meridian; stars unsteady, night hazy; the results must be received with caution; the small star was only visible by glimpses.

Unfavourable weather has prevented me getting more observations of this double star, although I have endeavoured to observe it every tolerable night, during several weeks.

Mean Result.

Position 64° 35′ *sf* (10 Obs.); Distance 6″.457 (5 Obs.); Epoch 1825.80.

No. DCCCIX. R. A. $22^h\ 24^m$; Decl. 6° 31′ N.

Nova;

Double; equal; each of the 10th magnitude.

Passy; September 15, 1825; Seven-feet Equatorial.

Position = 79° 55′ *np* or *sf*	5 Obs.	Diff. = 0° 38′	Excessively difficult.
Distance = 12″.777	5 Obs.	Diff. = 1″.130	

Both stars bluish, and bear scarcely any illumination..

Passy; October 11, 1825; Seven-feet Equatorial.

Equal; each of the 11th magnitude.

Position = 79° 28′ *np* or *sf*	5 Obs.	Diff. = 2° 44′	Excessively difficult.
Distance = 13″.018	5 Obs.	Diff. = 0″.432	

Observations deserving but very little confidence; the night is very hazy, and the stars cannot be seen without the greatest attention.

Mean Result.

Position 79° 41′ *np* or *sf* (10 Obs.); Distance 12″.897 (10 Obs.); Epoch 1825.74.

No. DCCCX. R. A. $22^h\ 25^m$; Decl. 3° 19′ N.

Struve, 756; Hist. Cæl. 108.

Double; $8\frac{1}{2}$ and 10th magnitudes; the small star is blue, and bears a very tolerable illumination.

Passy; October 2, 1824; Seven-feet Equatorial.

Position = 55° 27′ *sf* | 5 Obs. | Diff. = 0° 45′ } Not difficult.
Distance = 14″.311 | 5 Obs. | Diff. = 0″.769 }

Observed on the meridian.

Passy; November 21, 1824; Seven-feet Equatorial.

9th and 11th magnitudes.

Position = 55° 44′ *sf* | 5 Obs. | Diff. = 5° 23 } Excessively difficult.
Distance = 13″.813 | 5 Obs. | Diff. = 1″.010 }

Night unfavourable.

Mean Result.

Position 55° 35′ *sf*; Distance 14″.062; Epoch 1824.82.

No. DCCCXI. R. A. $22^h\ 29^m$; Decl. 37° 57′ N.

Struve, 758.

Double; 9th and $9\frac{1}{2}$ magnitudes; and bear but a slight illumination.

Passy; October 2, 1824; Seven-feet Equatorial.

Position = 67° 9′ *np* | 5 Obs. | Diff. = 0° 47′ } Very difficult.
Distance = 21″.413 | 5 Obs. | Diff. = 0″.986 }

Passy; November 24, 1824; Seven-feet Equatorial.

10th and 11th magnitudes.

Position = 68° 27′ *np* | 3 Obs. | Diff. = 1° 10′. Excessively difficult.

The night is become so abominably bad, no more observations can be gotten.

Passy; September 9, 1825; Seven-feet Equatorial.

$9\frac{1}{2}$ and 10th magnitudes.

Position = 67° 6′ *np* | 5 Obs. | Diff. = 1° 47′ } Extremely difficult.
Distance = 20″.937 | 5 Obs. | Diff. = 0″.505 }

Stars tolerably steady; but the night is so extremely hazy, that neither of them will scarcely bear any illumination.

Mean Result.

Position 67° 26′ *np* (13 Obs.); Epoch 1825.11;
Distance 21″.175 (10 Obs.); Epoch 1825.22.

No. DCCCXII. R. A. $22^h\ 30^m$; Decl. 15° 28′ S.

STRUVE, 759; Hist. Cæl. 181.

Double; $9\frac{1}{2}$ and 10th magnitudes, and bear only a very slight illumination.

Passy; September 27, 1824; Seven-feet Equatorial.

Distance = 6″.547 | 5 Obs. | Diff. = 1″.082. Extremely difficult.

Passy; November 21, 1824; Seven-feet Equatorial.

$9\frac{1}{2}$ and 10th magnitudes.

Position = 56° 4′ *np* | 5 Obs. | Diff. = 3° 8′
Distance = 5″.753 | 5 Obs. | Diff. = 1″.082 } Exceedingly difficult.

Stars very steady. Night tolerably fine.

Passy; September 9, 1825; Seven-feet Equatorial.

$9\frac{1}{2}$ and 10th magnitudes.

Position = 57° 28′ *sf* | 5 Obs. | Diff. = 1° 23′
Distance = 5″.732 | 5 Obs. | Diff. = 0″.841 } Extremely difficult.

These stars are of a bluish colour, and neither bear illumination nor magnifying power.

Mean Result.

Position 56° 46′ *sf* or *np* (10 Obs.); Epoch 1825.29;
Distance 6″.011 (15 Obs.); Epoch 1825.11.

No. DCCCXIII. R. A. $22^h\ 31^m$; Decl. 38° 7′ N.

10 Lacertæ; STRUVE, 760; V. 97.

Double; 6th and 12th magnitudes; the small star scarcely bears any illumination.

Passy; October 7, 1824; Seven-feet Equatorial.

Position = 41° 20′ *nf* | 5 Obs. | Diff. = 2° 45′
Distance = 1′ 0″.611 | 5 Obs. | Diff. = 0″.937 } Extremely difficult.

Passy; December 6, 1824; Seven-feet Equatorial.

6th and 12th magnitudes.

Position = 42° 34′ *nf* | 2 Obs. | Diff. = 0° 7′. Excessively difficult.

The night is at present fine, but the small star will not bear even the slightest illumination. No measures of distance can be procured.

No. DCCCXIII. continued.

Passy; October 12, 1825; Seven-feet Equatorial.

7th and 13th or 14th magnitudes.

Position = 40° 48′ *nf* | 5 Obs. | Diff. = 2° 29′ } Excessively difficult.
Distance = 1″.277 | 5 Obs. | Diff. = 0″.601 }

Observed on the meridian with 157; night very fine.

Mean Result.

Position 41° 19′ *nf* (12 Obs.); Epoch 1825.16;
Distance 1″.444 (10 Obs.); Epoch 1825.27.

The present angle differs only 2° 34′ from that found in 1783. (H.)

No. DCCCXIV. R. A. 22^h 33^m; Decl. 29° 7′ N.

Nova;

Double; equal; each 10th magnitude.

Passy; September 2, 1825; Seven-feet Equatorial.

Position = 9° 33′ *np* or *sf* | 5 Obs. | Diff. = 1° 24′ } Excessively difficult.
Distance = 18″.425 | 5 Obs. | Diff. = 0″.769 }

Stars steady, and on the meridian; but the results may be a little suspected.

Passy; October 11, 1825; Seven-feet Equatorial.

11th and 12th magnitudes.

Position = 9° 52′ *np* | 5 Obs | Diff. = 1° 31′ } Excessively difficult.
Distance = 18″.620 | 5 Obs. | Diff. = 0″.529 }

Night so hazy, and the stars so very indistinct, that great confidence must not be placed in the accuracy of the observations.

Mean Result.

Position 9° 42′ *np* or *sf* (10 Obs.); Distance 18″.522;
Epoch 1825.72.

No. DCCCXV. R. A. $22^h\ 33^m$; Decl. 39° 17′ N.

12 Lacertæ; STRUVE, 761; VI. 121.

Double; 6th and 12th magnitudes.

Passy; October 7, 1824; Seven-feet Equatorial.

Position = 73° 55′ *nf* | 5 Obs. | Diff. = 1° 20′ } Excessively difficult.
Distance = 1″ 12″.257 | 5 Obs. | Diff. = 1″.635 }

The small star will scarcely bear any illumination. Night fine.

Passy; October 12, 1825; Seven-feet Equatorial.

6th and 13th, or 14th magnitudes.

Position = 73° 2′ *nf* | 5 Obs. | Diff. = 1° 9′ } Excessively difficult.
Distance = 1″ 11″.890 | 5 Obs. | Diff. = 0″.793 }

Observed with 157. Night very fine.

Mean Result.

Position 73° 28′ *nf* (10 Obs.); Distance 1′ 12″.073 (10 Obs.); Epoch 1825.27.

The angle of 1783 agrees with this within half a degree. (H.)

No. DCCCXVI. R. A. $22^h\ 35^m$; Decl. 29° 17′ N.

η Pegasi; STRUVE, 763; VI. 21.

Double; 3rd or 4th, and 12th magnitudes.

Passy; October 7, 1824; Seven-feet Equatorial.

Position = 68° 48′ *np* | 5 Obs. | Diff. = 0° 14′ } Extremely difficult.
Distance = 1′ 29″.381 | 5 Obs. | Diff. = 1″.539 }

Observed on the meridian.

Passy; December 6, 1824; Seven-feet Equatorial.

4th and 12th, or 15th magnitudes.

Position = 69° 4′ *np* | 5 Obs. | Diff. = 1° 12′ } Excesssively difficult.
Distance = 1′ 30″.266 | 5 Obs. | Diff. = 1″.683 }

The small star scarcely bears the slightest illumination.

Mean Result.

Position 68° 56′ *np*; Distance 1′ 29″.823; Epoch 1824.85.

Sir W. HERSCHEL gives no measures of this star. (H.)

No. DCCCXVII. R. A. $22^h\ 38^m$; Decl. 15° 0′ S.

τ' Aquarii; STRUVE, 765; V. 80.

Double; 6th and 12th magnitudes.

Passy; October 7, 1824; Seven-feet Equatorial.

Position = 23° 27′ *sf* | 5 Obs. | Diff. = 1° 41′
Distance = 30″.838 | 5 Obs. | Diff. = 0″.865 } Excessively difficult.

The night is remarkably fine. Observations made on the meridian.

Passy; November 21, 1824; Seven-feet Equatorial.

7th and 12th magnitudes.

Position = 21° 36′ *sf* | 5 Obs. | Diff. = 1° 20′. Excessively difficult.

Measures of distance I cannot obtain, yet the night is fine, and the stars are only 15 minutes west of the meridian.

Passy; October 12, 1825; Seven-feet Equatorial.

6th and 13th, or 14th magnitudes.

Position = 23° 18′ *sf* | 5 Obs. | Diff. = 2° 23′
Distance = 30″.235 | 5 Obs. | Diff. = 0″.697 } Excessively difficult.

Observed on the meridian with 157; with 181 I cannot see the small star.

Mean Result.

Position 22° 47′ *sf* (15 Obs.); Epoch 1825.15;
Distance 30″.536 (10 Obs.); Epoch 1825.27.

The measures of 1783 are, Position 19° 54′ *sf*; Distance 35″.62. The difference of Position 2° 53′ is not material, considering the difficulty of the star; but a *diminution* of distance to the extent of 5″.1 deserves notice, because the micrometrical error of the earlier observations would tend to produce an apparent *increase*. (H.)

No. DCCCXVIII. R. A. $22^h\ 40^m$; Decl. 14° 33′ S.

τ^3 Aquarii; STRUVE, 767; VI. 97.

Double; 5th and 12th magnitudes.

Passy; September 29, 1824; Seven-feet Equatorial.

Position = 22° 20′ *np* | 5 Obs. | Diff. = 1° 4′. Excessively difficult.

Passy; November 21, 1824; Seven-feet Equatorial.

7th and 15th magnitudes.

Position = 22° 28′ *np* | 5 Obs. | Diff. = 1° 13′. Excessively difficult.

Observations of distance impracticable; night tolerably good.

Passy; October 12, 1825; Seven-feet Equatorial.

5th and 14th, or 15th magnitudes.

Distance = 2′ 13″.120 | 5 Obs. | Diff. = 1″.731. Excessively difficult.

Observed on the meridian with 157; night very fine.

Passy; October 16, 1825; Seven-feet Equatorial.

5th and 12th, or 14th magnitudes.

Distance = 2′ 13″.756 | 5 Obs. | Diff. = 1″.274. Excessively difficult.

Observed with 92, when on the meridian; with 157 the small star could not be distinguished.

Mean Result.

Position 22° 24′ *np* (10 Obs.); Epoch 1824.81;
Distance 2′ 13″.438 (10 Obs.); Epoch 1825.78.

The angle of 1783 is 18° 30′ *np*, differing 3° 54′ from the present, which is considerable for a star of the 6th class. (H.)

No. DCCCXIX. R. A. $22^h\ 41^m$; Decl. 30° 23′ N.

Nova;

Double; 9th and 9¼ magnitudes; both bluish.

Passy; September 2, 1825; Seven-feet Equatorial.

Position = 19° 58′ *np* | 5 Obs. | Diff. = 2° 52′
Distance = 3″.532 | 5 Obs. | Diff. = 0″.288 } Excessively difficult.

Neither of these stars will bear much illumination. Observations perhaps a little suspicious; yet the night is very fine, and the stars are steady.

No. DCCCXIX. continued.

Passy; September 5, 1825; Seven-feet Equatorial.

Equal; each 10th magnitude.

Position = 21° 4′ *n p* or *s f* | 5 Obs. | Diff. = 3° 50′ } Excessively difficult.
Distance = 3″.893 | 5 Obs. | Diff. = 0″.336 }

Night very hazy.

Mean Result.

Position 20° 31′ *n p* or *s f*; Distance 3″.712; Epoch 1825.68.

No. DCCCXX. R. A. 22^h 42^m; Decl. 71° 56′ N.

STRUVE, 768; 1789. 219.

Double; 8th and 9th magnitudes.

Passy; October 9, 1824; Seven-feet Equatorial.

Position = 9° 24′ *n p* | 5 Obs. | Diff. = 0° 9′ }
Distance = 2′ 0″.848 | 5 Obs. | Diff. = 0″.601 } . . . .

A star C of the 11th magnitude makes an isosceles triangle with the stars A B here measured; and it is perhaps hardly so much as twice the distance from them, that they are from each other.

Position of A C 78° 30′ *n p* (single Observation.)

Passy; October 11, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Distance = 2′ 0″.942 | 5 Obs. | Diff. = 1″.154. Very difficult.

Observed with 157; the small star very indistinct on account of the fog.

Passy; October 12, 1825; Seven-feet Equatorial.

8th and 8¼ magnitudes.

Position = 9° 21′ *n p* | 5 Obs. | Diff. = 0° 40′. . . . .

Mean Result.

Position 9° 21′ *n p* (10 Obs.); Distance 2′ 0″.895 (10 Obs.); Epoch 1825.27.

No. DCCCXXI. R. A. $22^h\ 50^m$; Decl. 26° 49′ N.

Nova;

Double; 9th and 11th magnitudes.

Passy; September 9, 1825; Seven-feet Equatorial.

Position = 81° 0′ *nf*	5 Obs.	Diff. = 2° 48′	Extremely difficult.
Distance = 7″.074	5 Obs.	Diff. = 0″.360	

The small star is blue, and bears only the slightest illumination. Night hazy, but the stars are steady.

Passy; October 11, 1825; Seven-feet Equatorial.

10th and 12th magnitudes.

Position = 83° 22′ *nf*	5 Obs.	Diff. = 3° 0′	Excessively difficult.
Distance = 6″.626	5 Obs.	Diff. = 0″.553	

The night so very hazy, that I have no confidence in the observations of this double star.

Mean Result.

Position 82° 11′ *nf* (10 Obs.); Distance 6″.850 (10 Obs.); Epoch 1825.73.

No. DCCCXXII. R. A. $22^h\ 57^m$; Decl. 32° 26′ N.

Nova;

Double; 9th and 9½ magnitudes.

Passy; September 2, 1825; Seven-feet Equatorial.

Position = 70° 26′ *sf*	5 Obs.	Diff. = 1° 5′	Very steady.
Distance = 3″.532	5 Obs.	Diff. = 0″.432	

These stars bear a tolerable illumination. Night very fine.

Passy; October 11, 1825; Seven-feet Equatorial.

10th and 11th magnitudes.

Position = 71° 10 *sf*	5 Obs.	Diff. = 2° 45′	Excessively difficult.
Distance = 3″.337	5 Obs.	Diff. = 0″.432	

The night so foggy, that the measures are very suspicious.

Mean Result.

Position 70° 48′ *sf* (10 Obs.); Distance 3″.434 (10 Obs.); Epoch 1825.72.

No. DCCCXXIII. R. A. $23^h\ 2^m$; Decl. 58° 21′ N.

2 Cassiopeiæ; STRUVE, 772; VI. 55.

Double; 6th and 9th magnitudes.

Blackman-street; July 16, 1824; Five-feet Equatorial.

Position = 73° 27′ *sf* | 5 Obs. | Diff. = 0° 16′
Distance = 2′ 46″.397 | 5 Obs. | Diff. = 0″.885

Stars 1¼ hour east of the meridian, at the time of observation.

Passy; November 16, 1824; Seven-feet Equatorial.

6th and 9th magnitudes.

Position = 73° 14′ *sf* | 5 Obs. | Diff. = 0° 43′
Distance = 2′ 46″.969 | 5 Obs. | Diff. = 0″.793

Mean Result.

Position 73° 20′ *sf*; Distance 2′ 46″.683; Epoch 1824.70.

Sir W. HERSCHEL gives no measures of this star. (H.)

No. DCCCXXIV. R. A. $23^h\ 2^m$; Decl. 12° 54′ S.

STRUVE, 774; Hist. Cæl. 191.

Double; equal; each of the 9th magnitude.

Passy; October 7, 1824; Seven-feet Equatorial.

Position = 13° 7′ *np* or *sf* | 5 Obs. | Diff. = 1° 44′
Distance = 4″.092 | 5 Obs. | Diff. = 0″.577

These stars bear a very tolerable illumination. Night peculiarly favourable.

Passy; November 3, 1824; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 12° 15′ *np* | 5 Obs. | Diff. = 5° 18′
Distance = 4″.322 | 5 Obs. | Diff. = 0″.529 Very difficult.

Observed when half an hour west of the meridian.

Mean Result.

Position 12° 41′ *np* or *sf*; Distance 4″.207; Epoch 1824.80.

No. DCCCXXV. R. A. $23^h\ 2^m$; Decl. 35° 55′ N.

Nova;

Double; $6\frac{1}{2}$ and 7th magnitudes.

Passy; September 9, 1825; Seven-feet Equatorial.

Position = 50° 23′ *np*	5 Obs.	Diff. = 1° 50′	Very steady.
Distance = 1′ 5″.213	5 Obs.	Diff. = 0″.481	

Passy; September 15, 1825; Seven-feet Equatorial.

8th and $8\frac{1}{2}$ magnitudes.

Position = 49° 34′ *np*	5 Obs.	Diff. = 1° 38′	Steady.
Distance = 1′ 5″.449	5 Obs.	Diff. = 0″.505	

Mean Result.

Position 49° 58′ *np*; Distance 1′ 5″.331; Epoch 1825.70.

No. DCCCXXVI. R. A. $23^h\ 5^m$; Decl. 9° 52′ S.

STRUVE, 775; H. C. 191.

Triple; A $7\frac{1}{2}$, B 8th, and C of the 10th magnitudes.

Measures of A B.

Passy; October 7, 1824; Seven-feet Equatorial.

Position = 86° 17′ *sf*	5 Obs.	Diff. = 0° 32′	Unsteady.
Distance = 26″.178	5 Obs.	Diff. = 1″.154	

Passy; November 15, 1824; Seven-feet Equatorial.

8th and $8\frac{1}{2}$ magnitudes.

Position = 86° 3′ *sf*	5 Obs.	Diff. = 1° 35′	Very unsteady.
Distance = 26″.374	5 Obs.	Diff. = 0″.384	

Measures of A C.

Passy; October 7, 1824; Seven-feet Equatorial.

$7\frac{1}{2}$ and 10th magnitudes.

Position = 19° 24′ *sf*	2 Obs.	Diff. = 0° 12′	Very difficult.
Distance = 2′ 37″.853	2 Obs.	Diff. = 0″.986	

The small star is very faint, and bears but very little illumination.

No. DCCCXXVI. continued.

Passy; November 15, 1824: Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 19° 4′ *sf* | 5 Obs. | Diff. = 0° 51′
Distance = 2′ 40″.351 | 3 Obs. | Diff. = 1″.250 } Very difficult.

Night is become so bad, that no more observations can be procured.

Passy; September 28, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Distance = 2′ 36″.985 | 5 Obs. | Diff. = 0″.601. Extremely difficult.

The small star is very obscure.

Mean Result.

of A B. Position 86° 10′ *sf*; Distance 26″.276; Epoch 1824.82.

of A C. Position 19° 10′ *sf* (7 Obs.); Epoch 1824.82;

Distance 2′ 38″.168 (10 Obs); Epoch 1825.13.

No. DCCCXXVII. R. A. 23h 6m; Decl. 10° 4′ S.

ψ Aquarii; STRUVE, 776: IV. 12.*

Double; 5th and 10th magnitudes.

Passy; October 9, 1824; Seven-feet Equatorial.

Position = 40° 57′ *np* | 5 Obs. | Diff. = 0° 42′
Distance = 49″.630 | 5 Obs. | Diff. = 0″.793 } Extremely difficult.

The small star scarcely bears the least illumination.

Passy; November 3, 1824; Seven-feet Equatorial.

5th and 10th magnitudes.

Position = 41° 20′ *np* | 5 Obs. | Diff. = 1° 32′
Distance = 50″.041 | 5 Obs. | Diff. = 1″.154 } Extremely difficult.

Observed when 40 minutes west of the meridian.

Mean Result.

Position 41° 8′ *np*; Distance 49″.835; Epoch 1824.80.

* It seems probable, from the total disagreement of the distances, that the star here measured cannot be identical with IV. 12, though the angles agree within 3° 34. The distance assigned by Sir W. HERSCHEL is 23′ 5‴ "pretty exact." (H.)

No. DCCCXXVIII. R. A. $23^h\ 13^m$; Decl. 34° 29′ N.

Nova;

Double; 10th and 12th magnitudes; scarcely bear the least illumination.

Passy; September 10, 1825; Seven-feet Equatorial.

Position = 87° 5′ *sp*	5 Obs.	Diff. = 3° 57′	Hazy.
Distance = 5″.292	5 Obs.	Diff. = 0″.673	

The measures are of such extreme difficulty, that I consider their accuracy open to suspicion. The small star is seen but with the utmost attention.

Passy; September 15, 1825; Seven-feet Equatorial.

9th and 12th, or 14th magnitudes.

Position = 85° 22′ *sp*	5 Obs.	Diff. = 2° 3′	Very steady.
Distance = 4″.943	5 Obs.	Diff. = 0″.505	

The small star decidedly pale blue, and bears but the most feeble illumination: the observations are so excessively difficult, that the results are somewhat questionable.

Mean Result.

Position 86° 19′ *sp*; Distance 5″.117; Epoch 1825.70.

No. DCCCXXIX. R. A. $23^h\ 14^m$; Decl. 9° 27′ S.

STRUVE, 778; P. XXIII. 69.

Double; $7\frac{1}{2}$ and 8th magnitudes.

Passy; October 9, 1824; Seven-feet Equatorial.

Position = 4° 28′ *np*	5 Obs.	Diff. = 1° 1′	. . .
Distance = 8″.144	5 Obs.	Diff. = 0″.721	

Passy; November 3, 1824; Seven-feet Equatorial.

$7\frac{1}{2}$ and 8th magnitudes.

Position = 3° 40′ *np*	5 Obs.	Diff. = 1° 9′	. . . .
Distance = 7″.819	5 Obs.	Diff. = 0″.649	

Observed when 70 minutes west of the meridian.

Mean Result.

Position 4° 4′ *np*; Distance 7″.981; Epoch 1824.80.

No. DCCCXXX. R. A. $23^h\ 18^m$; Decl. 0° 16′ N.

κ Piscium; STRUVE, 782; VI. 62.

Double; 5th and 12th magnitudes.

Passy; October 9, 1824; Seven-feet Equatorial.

Position = 74° 42′ *np*	5 Obs.	Diff. = 1° 3′	Excessively difficult.
Distance = 2″.548	5 Obs.	Diff. = 2″.164	

The small star under a very slight illumination, becomes invisible.

Passy; November 9, 1824; Seven-feet Equatorial.

5th and 12th, or 13th magnitudes.

Position = 75° 10′ *np*	5 Obs.	Diff. = 1° 32′	Excessively difficult.
Distance = 2″.632	5 Obs.	Diff. = 2″.765	

Night not very favourable.

Mean Result.

Position 74° 56′ *np*; Distance 2″.090; Epoch 1824.82.

Sir W. HERSCHEL gives no measures of this star. (H.)

No. DCCCXXXI. R. A. $23^h\ 21^m$; Decl. 4° 17′ N.

STRUVE, 783; MAYER.

Double; 8th and $8\frac{1}{4}$ magnitudes.

Passy; October 14, 1824; Seven-feet Equatorial.

Position = 83° 58′ *sp*	5 Obs.	Diff. = 1° 12′	. . . .
Distance = 11″.654	5 Obs.	Diff. = 0″.745	

Passy; November 3, 1824; Seven-feet Equatorial.

8th and $8\frac{1}{4}$ magnitudes.

Position = 84° 5′ *sp*	5 Obs.	Diff. = 1° 17′	. . . .
Distance = 11″.709	5 Obs.	Diff. = 1″.274	

Stars 37 minutes west of the meridian, at the time of observation.

Mean Result.

Position 84° 1′ *sp*; Distance 11″.681; Epoch 1824.81.

No. DCCCXXXII. R. A. $23^h\ 23^m$; Decl. $42°\ 50'$ N.

II. 94? or Nova?*

Double; 9th and 11th, or 12th magnitudes.

Passy; September 24, 1825; Seven-feet Equatorial.

Position = $44°\ 14'$ *np*	5 Obs.	Diff. = $1°\ 8'$	South.
Distance = $4''.374$	5 Obs.	Diff. = $0''.553$	
Position = $39°\ 33'$ *np*	5 Obs.	Diff. = $5°\ 2'$	
Position = $38°\ 55'$ *np*	5 Obs.	Diff. = $5°\ 42'$.	Capt. Beaufort.

The small star is so extremely faint, that Capt. B. cannot procure any observations of distance. Night tolerably favourable.

Passy; September 27, 1825; Seven-feet Equatorial.

9th and 12th magnitudes.

Position = $44°\ 45'$ *np*	5 Obs.	Diff. = $4°\ 15'$	South.
Distance = $4''.405$	5 Obs.	Diff. = $0''.577$	

Measures which merit but little confidence; the small star so excessively indistinct, that Captain Beaufort cannot obtain any observations.

Mean Result.

Position $41°\ 52'$ *np* (20 Obs.); Distance $4''.389$ (10 Obs.); Epoch 1825.74.

Sir W. Herschel's observations of this star (if II. 94) are as follows:

1783.66, Position $34°\ 24'$ *np*; 1802.5, $35°\ 56'$ *np*.

These compared with the present, present a great disagreement. If we take the mean of the two earlier observations we get $35°\ 10'$ *np*, and 1793.1 for a mean epoch, which compared with the measures of 1825 give an arc of $6°\ 42'$, described in an interval of 33 years, or about $+\ 0°.203$ per annum. The data, it is true, are precarious, but the conclusion is such as to render it worth while to watch this star in future. (H.)

* This star was found by sweeping in the neighbourhood of the 784th star of Struve's Catalogue. The star however whose place is there given, was only seen as a single star: it is therefore very probable that the one here measured is Sir W. Herschel's star.

No. DCCCXXXIII. R. A. $23^h\ 32^m$; Decl. $5°\ 17'$ N.

STRUVE, 785; Hist. Cæl. 128.

Double; 8th and $8\frac{1}{2}$ magnitudes.

Passy; October 9, 1824; Seven-feet Equatorial.

Position $= 40°\ 59'\ np$ | 5 Obs. | Distance $= 3''\ 58'$.

Passy; November 3, 1824; Seven-feet Equatorial.

8th and $8\frac{1}{2}$ magnitudes.

Position $= 41°\ 0'\ np$ | 5 Obs. | Diff. $= 2°\ 5'$ }
Distance $= 14''.633$ | 5 Obs. | Diff. $= 0''.601$ } . . . .

Passy; September 9, 1825; Seven-feet Equatorial.

$8\frac{1}{2}$ and 9th magnitudes.

Position $= 42°\ 44'\ np$ | 5 Obs. | Diff. $= 1°\ 32'$ }
Distance $= 14''.518$ | 5 Obs. | Diff. $= 0''.986$ } Difficult.

During the observations, the small star was frequently very indistinct. Night very hazy.

Mean Result.

Position $41°\ 34'\ np$; (15 Obs.); Epoch 1825.10;
Distance $14''.575$; (10 Obs.); Epoch 1825.26.

No. DCCCXXXIV. R. A. $23^h\ 38^m$; Decl. $27°\ 28'$ N.

STRUVE, 787; IV. 107.

Double; 6th and 10th magnitudes.

Passy; October 14, 1824; Seven-feet Equatorial.

Position $= 53°\ 50'\ nf$ | 5 Obs. | Diff. $= 1°\ 15'$ }
Distance $= 32''.481$ | 5 Obs. | Diff. $= 1''.587$ } Extremely difficult.

Night is very fine, but the small star scarcely bears any illumination.

Passy; November 3, 1824; Seven-feet Equatorial.

6th and 11th, or 12th magnitudes.

Position $= 53°\ 13'\ nf$ | 5 Obs. | Diff. $= 2°\ 10'$ }
Distance $= 31''.666$ | 2 Obs. | Diff. $= 0''.192$ } Excessively difficult.

The small star will not bear the slightest illumination.

Mean Result.

Position $53°\ 31'\ nf$ (10 Obs.); Distance $32''.248$ (7 Obs);
Epoch 1824.81.

The present angle differs $-3°\ 10'$ from that of 1783. (H.)

No. DCCCXXXV. R. A. $23^h\ 39^m$; Decl. 3° 46′ S.

20 Piscium; STRUVE, 788.

Double; 6th and 12th magnitudes; small, blue.

Passy; October 14, 1824; Seven-feet Equatorial.

Position = 17° 10′ *np* | 5 Obs. | Diff. = 0° 25′
Distance = 2′ 50″.500 | 5 Obs. | Diff. = 2″.524 } Excessively difficult.

Night extremely fine, but the small star will scarcely bear any illumination.

Passy; November 25, 1824; Seven-feet Equatorial.

7th and 15th magnitudes.

Position = 17° 17′ *np* | 5 Obs. | Diff. = 0° 33′. Excessively difficult.

Observations of distance cannot be procured, although the night is fine.

Passy; September 28, 1825; Seven-feet Equatorial.

6th and 12th, or 14th magnitudes.

Distance = 2′ 51″.349 | 5 Obs. | Diff. = 0″.913. Excessively difficult.

The small star becomes invisible under the most feeble illumination.

Mean Result.

Position 17° 13′ *np*; Epoch 1824.83; Distance 2′ 50″.924; Epoch 1825.26.

No. DCCCXXXVI. R. A. $23^h\ 49^m$; Decl. 23° 22′ N.

Nova;

Double; $8\frac{1}{2}$ and 11th magnitudes.

Passy; September 10, 1825; Seven-feet Equatorial.

Position = 43° 54′ *np* | 5 Obs. | Diff. = 0° 35′
Distance = 9″.471 | 5 Obs. | Diff. = 0″.481 } Hazy.

The small star is so extremely indistinct, and the measures so excessively difficult, that the results are perhaps a little inaccurate.

Passy; September 15, 1825; Seven-feet Equatorial.

$8\frac{1}{2}$ and 11th magnitudes.

Position = 45° 23′ *np* | 5 Obs. | Diff = 4° 4′
Distance = 9″.252 | 5 Obs. | Diff. = 0″.962 } Excessively difficult.

The small star is pale blue, and bears but the slightest illumination.

Mean Result.

Position 44° 38′ *np*; Distance 9″.361; Epoch 1825.70.

No. DCCCXXXVII. R. A. $23^h\ 54^m$; Decl. 65° 6′ N.

Struve, 794.

Double; 8th and 9th magnitudes.

Passy; October 21, 1824; Seven-feet Equatorial.

Position = 20° 6′ *nf*	5 Obs.	Diff. = 3° 22′	South.
Distance = 15″.520	5 Obs.	Diff. = 0″.817	
Position = 18° 15′ *nf*	2 Obs.	Diff. = 0° 30′	Mr. Troughton.
Distance = 15″.285	5 Obs.	Diff. = 2″.019	

Passy; October 7, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 19° 48′ *nf*	5 Obs.	Diff. = 0° 45′	South.
Distance = 15″.618	5 Obs.	Diff. = 0″.817	
Position = 18° 44′ *nf*	5 Obs.	Diff. = 1° 5′	Capt. Beaufort.
Distance = 15″.287	5 Obs.	Diff. = 2″.332	

During Capt. Beaufort's observations, the stars became very faint, in consequence of the deposition of dew on the exterior and interior surfaces of the object-glass.

Mean Result.

Position 19° 24′ *nf* (17 Obs.); Distance 15″.427 (20 Obs.); Epoch 1825.28.

No. DCCCXXXVIII. R. A. $23^h\ 55^m$; Decl. 61° 17′ N.

9 Cassiopeiæ; Struve, 795; V. 79.*

Double; 6th and 10th magnitudes; small, blue.

Passy; October 21, 1824; Seven-feet Equatorial.

Position = 74° 25′ *sp*	5 Obs.	Diff. = 0° 29′	Difficult.
Distance = 4′ 5″.682	5 Obs.	Diff. = 1″.298	

Passy; November 16, 1824; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = 74° 21′ *sp*	5 Obs.	Diff. = 0° 32′	Difficult.
Distance = 4′ 5″.165	5 Obs.	Diff. = 1″.154	

Mean Result.

Position 74° 23′ *sp*; Distance 4′ 5″.423; Epoch 1824.84.

* The star here measured is called V. 79 in M. Struve's Catalogue, but is manifestly a different star. (H.)

RE-EXAMINATION OF THIRTY-SIX DOUBLE AND TRIPLE STARS, THE DISTANCES AND POSITIONS OF WHICH, AS OBSERVED BY MR. HERSCHEL AND MR. SOUTH, WERE PUBLISHED IN THE PHILOSOPHICAL TRANSACTIONS FOR 1824.

No. I. R. A. $0^h\ 38^m$; Decl. 56° 51′ N.

η Cassiopeiæ; III. 3; H. and S. 8.

Double; 6th and 9th magnitudes.

Passy; October 7, 1825; Seven-feet Equatorial.

Position = 8° 21′ *nf*	7 Obs.	Diff. = 2° 3′	South.
Distance = 9″.968	5 Obs.	Diff. = 0″.889	
Position = 8° 1′ *nf*	7 Obs.	Diff. = 3° 45′	Capt. Beaufort.
Distance = 9″.786	5 Obs.	Diff. = 0″.553	

Night not at present favourable. Observed when 40 minutes west of meridian.

Passy; October 11, 1825; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = 6° 42′ *nf*	7 Obs.	Diff. = 1° 36′	Difficult.
Distance = 9″.959	5 Obs.	Diff. = 0″.432	

Night foggy; the small star very indistinct: observed when 50′ west of meridian.

Passy; October 12, 1825; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = 6° 2′ *nf*	7 Obs.	Diff. = 1° 26′	Difficult.
Distance = 9″.736	5 Obs.	Diff. = 0″.745	

Observed when one hour west of the meridian with 181. The stars, which have hitherto been remarkably steady and well defined, are now suddenly so excessively unsteady and ill defined, that to persevere in observing is altogether useless.

No. I. R. A. $0^h\ 38^m$; Decl. 56° 51′ N.
η Cassiopeiæ; III. 3; H. and S. 8.
continued.

Passy; October 13, 1825; Seven-feet Equatorial.
7th and 10th, or 11th magnitudes.

Position = 5° 59′ *nf*	7 Obs.	Diff. = 4° 3′	Very difficult.
Distance = 9″.911	5 Obs.	Diff. = 0″.264	

Observed when one hour west of the meridian. The fog is now become so dense, that the stars are scarcely perceptible.

Passy; October 16, 1825; Seven-feet Equatorial.
6th and 10th magnitudes.

Position = 6° 27′ *nf*	7 Obs.	Diff. = 2° 40′	Difficult.
Distance = 10″.067	5 Obs.	Diff. = 0″.384	

Night very foggy; stars ill defined and unsteady.

A continuation of bad weather from this date till the 22nd instant, when the observatory at Passy was demolished, rendered further observations of this star impracticable.

Mean Result.

Position 6° 55′ *nf* (42 Obs.); Distance 9″.904 (30 Obs.); Epoch 1825.78.

In 1821.9 the angle was measured at 7° 9′ *nf*. The motion therefore in 3.9 years appears only to have been 0° 14′, direct, whereas computing on the annual motion + 0°.5133 it should be 2° 0′. The observation of 1821 is a mean of not more than 7 single measures. It is possible therefore that it may be somewhat erroneous, though probably not to the whole extent (1° 46′) which this discordance would require; yet a trifling error in the present measure or in the angular velocity would reconcile all. Meanwhile the main point, the *direction* of the motion, agreeing, may be regarded as confirming the result already arrived at. (H.)

No. II. R. A. $5^h\ 0^m$; Decl. $8°\ 53\frac{1}{2}'$ S.

IV. 43; H. and S. 50.

Double; 8th and 10th magnitudes; small, blue, and bears only a very feeble illumination.

Passy; January 17, 1825; Seven-feet Equatorial.

Position = $8°\ 17'$ *nf* | 5 Obs. | Diff. = $1°\ 49'$ } Extremely difficult.
Distance = $20''.755$ | 5 Obs. | Diff. = $1''.154$ }

Observed when 10 minutes west of the meridian; the dew on the object-glass is very troublesome.

Passy; January 19, 1825; Seven-feet Equatorial.

8th and 11th, or 12th magnitudes.

Position = $9°\ 8'$ *nf* | 5 Obs. | Diff. = $0°\ 45'$ } Extremely difficult.
Distance = $22''.349$ | 5 Obs. | Diff. = $1''.202$ }

Observations made on the meridian; night very fine.

Passy; February 6, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Distance = $22''.643$ | 5 Obs. | Diff. = $1''.779$. Extremely difficult.

Should this set favour one series of the former observations more than the other, I feel so little confidence in them whilst obtaining them, that I would not reject either, but would prefer receiving the mean of all, as a final determination. Night tolerably clear, and the stars very steady.

Mean Result.

Position $8°\ 42'$ *nf* (10 Obs.); Epoch 1825.05;
Distance $21''.916$ (15 Obs.); Epoch 1825.06.

Until arranging the work for presentation to the Royal Society, I was not aware that the former memoir contained the following observations of this double star, made by Mr. HERSCHEL and myself. Position $10°$ $6'$ *nf*; Distance $21''.763$; Epoch 1821.97.

No. III. R. A. $5^h\ 22^m$; Decl. $16°\ 55'$ N.

III. 93; H. and S. 58.

Double; 8th and $8\frac{1}{2}$ magnitudes.

Passy; December 23, 1824; Seven-feet Equatorial.

Position = 51° 27′ *sf*	5 Obs.	Diff. = 1° 12′	Night very bad.
Distance = 11″.031	5 Obs.	Diff. = 0″.505	

Passy; December 23, 1824; Portable Transit.

Observed R. A. of the larger star = $5^h\ 22'\ 8''.06$.

Passy; December 31, 1824; Seven-feet Equatorial.

7th and $7\frac{1}{2}$ magnitudes.

Position = 51° 9′ *sf*	5 Obs.	Diff. = 2° 35′	Very unsteady.
Distance = 10″.692	5 Obs.	Diff. = 0″.360	

Night unfavourable; stars not well defined.

Mean Result.

Position 51° 18′ *sf*; Distance 10″.861; Epoch 1824.99.

This star was re-measured unintentionally; I was not aware that observations of it were communicated in the former memoir, which give for the Position 52° 4′ *sf*; and Distance 9″.790; Epoch 1821.96. The positions agree very well, but the distances differ more than could be wished.

No. IV. R. A. $6^h\ 20^m$; Decl. $6°\ 55'$ S.

11 Monocerotis; H. and S. 71.

Triple; perhaps quadruple; but the fourth star is very distant. A $6\frac{1}{2}$, B 7th, C $7\frac{1}{2}$, and D of the 10th magnitudes.

Measures of A B.

Blackman-street; February 15, 1824; Five-feet Equatorial.

Position = 40° 38′ *sf*	5 Obs.	Diff. = 0° 50′	SOUTH.
Distance = 8″.280	5 Obs.	Diff. = 0″.221	

Blackman-street; March 2, 1824; Five-feet Equatorial.

Position = 40° 5′ *sf*	4 Obs.	Diff. = 0° 45′	Mr. HERSCHEL.
Distance = 7″.700	5 Obs.	Diff. = 0″.727	

Night hazy.

No. IV. R. A. $6^h\ 20^m$; Decl. $6°\ 55'$ S.

11 Monocerotis; H. and S. 71.

continued.

Measures of B C.

Blackman-street; February 15, 1824; Five-feet Equatorial.
7th and 7½ magnitudes.

Position = 13° 53′ *sf*	5 Obs.	Diff. = 2° 26′	South.
Distance = 3″.266	5 Obs.	Diff. = 0″.758	

Blackman-street; March 2, 1824; Five-feet Equatorial.

Position = 13° 25′ *sf*	5 Obs.	Diff. = 1° 10′	Mr. Herschel.
Distance = 3″.309	2 Obs.	Diff. = 0″.253	

Night hazy.

Observations of the distant star cannot be obtained.

Measures of B D.

Blackman-street; February 15, 1824; Five-feet Equatorial.
7th and 10th magnitudes.

Position = 66° 33′ *np*	3 Obs.	Diff. = 0° 50′	South.
Distance = 4′ 10″.957	3 Obs.	Diff. = 0″.885	

Mean Result.

of A B. Position 40° 25′ *sf* (9 Obs.); Distance 7″.990 (10 Obs.);
Epoch 1824.12.

of B C. Position 13° 39′ *sf* (10 Obs.); Distance 3″.278 (7 Obs.);
Epoch 1824.12.

of B D. Position 66° 33′ *np* (3 Obs.); Distance 4′ 10″.957 (3 Obs.);
Epoch 1824.12.

This star was measured under the idea that it was an unobserved star.

Our measures in the former paper are for the position of A B. 39° 29′ *sf*; of B C. 10° 41′ *sf*; of A D. 67° 20′ *np*; 1822.09; and for the distance,

of A B. 6″.862; of B C. 3″.243.

The distances ascribed to A B disagree, it is true, more than a second, a very considerable quantity on so small a distance, it must be confessed. It is probable that the real distance is a mean between them, or 7″.42.

No. V. R. A. $6^h\ 30^m$; Decl. 59° 87′ N.

12 Lyncis; I. 6 and III. 22; H. and S. 74.

Triple; A of the 7th, B of the 7½, and C of the 9th magnitudes.

Measures of A B.

Passy; April 1, 1825; Seven-feet Equatorial.

Position = 63° 32′ *sf* | 6 Obs. | Diff. = 4° 45′. Very unsteady.

Observed when 1½ hour west of the meridian with 273.

Passy; April 3, 1825; Seven-feet Equatorial.

7th and 7½ magnitudes.

Position = 66° 22′ *sf* | 7 Obs. | Diff. = 2° 59′ }
Distance = 2″.488 | 5 Obs. | Diff. = 0″.264 } By strong twilight.

Observed when one hour west of the meridian, with a power of 413, which separates the discs of the stars completely: they are most beautifully defined. The measures of distance are a little difficult, because the instrument is thrown into tremours by the wind: the sun scarcely below the horizon when the observations were taken. No artificial illumination necessary.

Passy; April 4, 1825; Seven-feet Equatorial.

7½ and 8th magnitudes.

Position = 63° 15′ *sf* | 7 Obs. | Diff. = 2° 30′ }
Distance = 2″.469 | 5 Obs. | Diff. = 0″.553 } Difficult.

One hour and a half west of the meridian when observed with 413; stars at times well defined, but are very unsteady.

Passy; April 5, 1825; Seven-feet Equatorial.

7th and 7½ magnitudes.

Position = 63° 59′ *sf* | 7 Obs. | Diff. = 3° 11′ }
Distance = 2″.630 | 5 Obs. | Diff. = 0″.432 } Unsteady.

Observed with 413.

Measures of A C.

Passy; April 1, 1825; Seven-feet Equatorial.

7th and 9th magnitudes.

Position = 34° 10′ *np* | 6 Obs. | Diff. = 2° 0′. Very unsteady.

Observed when 1½ hour west of the meridian with 273.

No. V. R. A. $6^h\ 30^m$; Decl. 59° 37′ N.

12 Lyncis; I. 6. and III. 22; H. and S. 74.

continued.

Passy; April 3, 1825; Seven-feet Equatorial.

7th and 9½ magnitudes.

Position = 36° 35′ *sp*	7 Obs.	Diff. = 2° 11′	By twilight.
Distance = 8″.754	5 Obs.	Diff. = 0″.312	

Angles obtained with the greatest facility; distances rather difficult, the instrument being agitated by the wind; magnifying power used 413.

Passy; April 4, 1825; Seven-feet Equatorial.

7½ and 9½ magnitudes.

Position = 35° 15′ *sp*	7 Obs.	Diff. = 1° 20′	Unsteady.
Distance = 9″.379	5 Obs.	Diff. = 0″.360	

Observed with 413, when 1½ hour west of the meridian.

Passy; April 5, 1825; Seven-feet Equatorial.

7½ and 9th magnitudes.

Position = 35° 17′ *sp*	7 Obs.	Diff. = 1° 58′	Unsteady.
Distance = 9″.420	5 Obs.	Diff. = 0″.577	

Observed with 413.

Mean Result.

of A B. Position 64° 21′ *sf* (27 Obs.); Distance 2″.529 (15 Obs.);

of A C. Position 35° 21′ *np* (27 Obs); Distance 9″.184 (15 Obs.);

Epoch 1825.25.

There is a considerable change in the position of the close star since the year 1823. At that time (1823.28) the angle was 68° 39′ *sf* (See Phil. Trans. 1824. Part III.) Hence it appears that the small star has continued its motion in the direction there assigned to it; and, if we may confide sufficiently in both data, with an accelerated velocity, for the computed motion corresponding to an interval of 2.0 years would be −3°.148, whereas the observations make it −4° 18′ or −4°.3. Meanwhile the direction of the motion is as predicted, and we may therefore regard the reality of this star's rotation as fully confirmed. (H.)

No. VI. R. A. $7^h\ 23^m$; Decl. 32° 17′ N.

Castor; II. 1; H. and S. 81.

Double; 3rd and 4th magnitudes.

Passy; February 18, 1825; Seven-feet Equatorial.

Position = 7° 8′ *sp* | 10 Obs. | Diff. = 1° 54′. Tolerably steady.

Observed within half an hour of either side of the meridian; no other double star visible. During the measures, the larger star passed through all gradations of magnitude, between the third and ninth; a circumstance which it is necessary to mention, as in taking the mean they ought not to be allowed a value, proportional to their number.

Passy; March 31, 1825; Seven-feet Equatorial.

3rd and 4th magnitudes.

Position = 6° 51′ *sp* | 7 Obs. | Diff. = 0° 59′. Tolerably steady.

Observed when 12 minutes west of the meridian.

Passy; April 3, 1825; Seven-feet Equatorial.

3rd and 4th magnitudes.

Position = 5° 59′ *sp*	7 Obs.	Diff. = 1° 36′	By daylight.
Distance = 4″.489	5 Obs.	Diff. = 0″.529	

Stars beautifully defined, and as steady as possible; the sun shining; not a cloud visible: observations made with 787.

Passy; April 4, 1825; Seven-feet Equatorial.

3rd and 4th magnitudes.

Position = 7° 3′ *sp*	7 Obs.	Diff. = 1° 11′	Unsteady.
Distance = 4″.796	5 Obs.	Diff. = 0″.288	

Observed with 181, when 20 minutes west of the meridian.

Passy; April 5, 1825; Seven-feet Equatorial.

3rd and 4th magnitudes.

Position = 6° 48′ *sp*	7 Obs.	Diff. = 1° 24′	By twilight.
Distance = 4″.958	5 Obs.	Diff. = 0″.481	

Observed on the meridian with 787; stars exquisitely defined, and as steady as possible.

Passy; April 6, 1825; Seven-feet Equatorial.

3rd and 4th magnitudes.

Position = 6° 22′ *sp*	7 Obs.	Diff. = 1° 18′	By daylight.
Distance = 4″.826	5 Obs.	Diff. = 0″.481	

The sun shining; stars very steady, and extremely well defined.

Observations made with 513, when 10 minutes east of the meridian.

No. VI. R. A. $7^h\ 23^m$; Decl. 32° 17′ N.
Castor; II. 1; H. and S. 81.
continued.

Mean Result.

Position 6° 42′ *sp* (42 Obs.); Epoch 1825.23;
Distance 4″.767 (20 Obs.); Epoch 1825.26.

Note; In taking the mean, the ten observations of February 18 are considered equivalent to the seven of which the other sets are composed.

These measures, compared with those recorded in the Philosophical Transactions for 1824, afford, in the short interval of 2ʸ.12, a very satisfactory verification of the quantity as well as of the direction of the motion there assigned. The angle at that epoch (1823.11) was 5° 1′ *sp*. It is now 6° 42′ *sp*. The motion then is — 1° 41′ or retrograde, as it ought to be. Now, if we compute the motion on the supposition of the actual angular velocity being (as there assigned) —0°.777, we shall find — 1° 38′, differing insensibly from the observed quantity. That this degree of exactness is not quite accidental, other similar instances to be adduced will convince us. (H.)

No. VII. R. A. $7^h\ 58^m$; Decl. 28° 0′ N.
11 Cancri; I. 11; H. and S. 88.
Double; 8th and 9½ magnitudes.

Blackman-street; March 12, 1824; Five-feet Equatorial.

Position = 83° 24′ *np*	5 Obs.	Diff. = 3° 0′	. . . .
Distance = 4″.694	5 Obs.	Diff. = 0″.853	

Blackman-street; March 31, 1824; Five-feet Equatorial.
8th and 9½ magnitudes.

Position = 83° 7′ *np*	5 Obs.	Diff. = 2° 46′	. . . .
Distance = 4″.659	5 Obs.	Diff. = 0″.221	

No. VII. R. A. $7^h\ 58^m$; Decl. 28° 0′ N.

11 Cancri; I. 11; H. and S. 88.

continued.

Mean Result.

Position 85° 15′ *n p*; Distance 4″.676; Epoch 1824.21.

When this star was measured, I supposed it to be the star whose R. A. in STRUVE's Catalogue is given $7^h\ 54'.5$; Decl. 28° 0′ N.; whether it is, or is not 11 Cancri, I cannot say; but it is unquestionably synonymous with the double star No. 88 of the collection observed by H. and S. and is the star observed by Sir W. HERSCHEL. Our former measures were, Position 84° 30′ *n p*; Distance 4″.498; Epoch 1822.21.

No. VIII. R. A. $8^h\ 2^m$; Decl. 18° 11′ N.

ζ Cancri; I. 24 and III. 19; H. and S. 90.

A very pretty double star; 6½ and 7th magnitudes.

Blackman-street; March 13, 1824; Five-feet Equatorial.

Position = 67° 51′ *s f* | 5 Obs. | Diff. = 1° 51′ } Remarkably steady.
Distance = 6″.209 | 5 Obs. | Diff. = 0″.853 }

Observations extremely satisfactory.

Blackman-street; March 31, 1824; Five-feet Equatorial.

7th and 7¼ magnitudes.

Position = 71° 9′ *s f* | 5 Obs. | Diff. = 0° 55′ } Tolerably steady.
Distance = 6″.181 | 5 Obs. | Diff. = 0″.695 }

Observed when two hours west of the meridian; but the stars are well defined.

Passy; January 17, 1825; Seven-feet Equatorial.

7½ and 8th magnitudes.

Position = 70° 15′ *s f* | 5 Obs. | Diff. = 1° 49′

The position observed on March 13th, 1824, differs more than might be wished with that obtained subsequently; still the favourable circumstances under which the discordant set was procured, would not justify their rejection; allowing all equal weight, we have for the

No. VIII. R. A. 8^h 2′; Decl. 18° 11′ N.
ζ Cancri; I. 24 and III. 19; H. and S. 90.
continued.

Mean Result.

Position 69° 45′ *sf* (15 Obs.); Epoch 1824.49;
Distance 6″.195 (10 Obs.); Epoch 1824.22.

When this star was observed in Blackman-street, in 1824, and again at this place in January of the present year, I regarded it as a new double star, and registered the observations of it as such; a comparison however of the results with the measures of ζ Cancri, leaves no room to doubt that the two stars are identical. Our former measures were Position 68° 17′ *sf*; Distance 6″.241; Epoch 1822.14. Observations however which immediately follow, show that the larger star is itself double; hence some suspicion as to the accuracy of these and of former measures will naturally arise.

Passy; April 3, 1825; Seven-feet Equatorial.

Triple; A of the 7th, B of the 8th, and C of the 8th magnitudes.

Measures of AB.

The eye-pieces adapted to the micrometer hitherto used with this instrument being inadequate to communicate to the telescope sufficient magnifying power to enable me to procure measures of this interesting close double star, I applied the micrometer of the Five-feet Equatorial,* which I had fortunately brought with me from England: the powers thus obtained are 92, 157, 181, 327, 413, 513 and 787. As to the

* To effect this change of micrometers, an alteration of the eye-tubes became necessary; on *this*, as on *every other* occasion, Mons^r. Gambey supplied my wants so *expeditiously*, and at the same time so *completely*, that during my abode here, I scarcely felt the loss of Mr. Troughton. The advantage of having a *first-rate* Artist, resident within striking distance of our observatory, is almost *incalculable*. Passy, Oct. 22, 1825.

No. VIII. R. A. $8^h\ 2^m$; Decl. 18° 11′ N.
ζ Cancri; I. 24 and III. 19; H. and S. 90.
continued.

value of the micrometer in seconds, rigorous examination has satisfied me that it is precisely the same with that of the micrometer formerly employed. The observations of this date, and of all subsequent to it, will be made by means of this micrometer.

Position = 31° 21′ *nf* | 7 Obs. | Diff. = 4° 0′ } Difficult.
Distance = 0″.887 | 5 Obs. | Diff. = 0″.192 }

Observed with 413, when a few minutes west of the meridian; the angles I consider very good; but the distances are perhaps a little inaccurate: the stars are well defined, but are very unsteady.

Passy; April 4, 1825; Seven-feet Equatorial.
7th and 8th magnitudes.

Position = 32° 18′ *nf* | 7 Obs. | Diff. = 6° 2′. Difficult.

I cannot procure any measures of distance, the extreme unsteadiness of the stars rendering it impossible. Observed with 413. Stars tolerably well defined, and on the meridian at the time of observation.

Passy; April 5, 1825; Seven-feet Equatorial.
7th and 8th magnitudes.

Position = 32° 51′ *nf* | 7 Obs. | Diff. = 9° 12′ } Difficult.
Distance = 1″.044 | 5 Obs. | Diff. = 0″.216 }

Observed with 413, a few minutes east of the meridian; stars unsteady, but at times well defined.

Passy; April 8, 1825; Seven-feet Equatorial.
7th and 8th magnitudes.

Position = 32° 4′ *nf* | 7 Obs. | Diff. = 7° 28′. Difficult.

Observed on the meridian with 413, but the stars are so unsteady, that measures of distance are impracticable.

Passy; April 14, 1825; Seven-feet Equatorial.
7th and 8th magnitudes.

Position = 32° 0′ *nf* | 7 Obs. | Diff. = 4° 7′. Very difficult.

Observed with 413, with which power no measures of distance can be procured, owing to the extreme unsteadiness of the stars. I therefore applied 327, and obtained as results,

No. VIII. R. A. $8^h\ 2^m$; Decl. 18° 11′ N.

ζ Cancri; I. 24 and III. 19; H. and S. 90.

continued.

Position = 32° 25′ *sf* | 8 Obs. | Diff. = 5° 35′ } Very difficult.
Distance = 1″.327 | 5 Obs. | Diff. = 0″.432 }

Stars one hour west of the meridian when observed.

By twilight, the sun below the horizon but a very few minutes, I saw the star decidedly double with a power of 181 only.

Measures of A C.

Passy; April 1, 1825; Seven-feet Equatorial.

7th and 8th magnitudes.

Position = 68° 26′ *sf* | 6 Obs. | Diff. = 2° 35′. Steady.

Observed when 35 minutes west of the meridian, with a power of 273. The angle thus obtained may be liable to an error of one or two degrees, for I see the large star *unquestionably* elongated; but the eye-piece now in use is the deepest magnifier which is adapted to this micrometer, and it is inadequate to separate the stars sufficiently to enable me to procure measures of them. At the time of perceiving the star elongated, I was unaware that it had been observed by Sir William Herschel as a close double star, as also that Mr. Herschel and myself, when we observed it in England as double of the 3rd class, had noted that "it is not to be seen triple, although beautifully defined and round." Vide Observations of the apparent Distances, &c. Phil. Trans. 1824. Part III. page 115.

Passy; April 3, 1825; Seven-feet Equatorial.

7th and 8th magnitudes.

Position = 67° 16′ *sf* | 7 Obs. | Diff. = 2° 0′ } Very difficult.
Distance = 5″.287 | 6 Obs. | Diff. = 0″.601 }

Observed with 413, when half an hour west of the meridian; stars extremely unsteady.

No. VIII. R. A. $8^h\ 2^m$; Decl. 18° 11′ N.
ζ Cancri; I. 24 and III. 19; H. and S. 90.
continued.

Passy; April 4, 1825; Seven-feet Equatorial.
7th and 8th magnitudes.

Position = 67° 14′ *sf* | 7 Obs. | Diff. = 1° 30′. Very difficult.

Observed with 413, when a few minutes west of the meridian; but the unsteadiness of the stars renders it impossible to procure any observations of distance.

Passy; April 5, 1825; Seven-feet Equatorial.
7th and 8th magnitudes.

Position = 68° 49′ *sf* | 7 Obs. | Diff. = 1° 27′ } Very difficult.
Distance = 5″.616 | 5 Obs. | Diff. = 0″.673 }

Observed a few minutes west of the meridian with 413; stars well defined, but very unsteady.

Mean Result.

of A B. Position 32° 10′ *nf* (43 Obs.); Distance 1″.086 (15 Obs);
of A C. ——— 67° 55′ *sf* (27 Obs.); ——— 5″.436 (11 Obs.);
Epoch 1825.27.

Note. The observations of A C, when the star A was only seen as a single star, are rejected.

This star presents the hitherto unique combination of three individuals, forming, if not a system connected by the agency of attractive forces, at least one in which all the parts are in a state of relative motion. To begin with the two nearer stars A and B. Sir W. HERSCHEL's measure of their position Nov. 28, 1781 (1781.90) was 86° 32′ *nf*. and it will be remarked, that a position so nearly perpendicular to the diurnal motion carries in some measure its own verification with it, as not liable to gross error. This differs no less than 54° 22′ from the present angle in the same quadrant, giving a mean annual motion of + 1″.254 or direct (*nf s p*). The distance remains as it was, so close as to be barely separable. In 1802 it was so also; but at that time, though observed by

No. VIII. R. A. $8^h\ 2^m$; Decl. 18° 11′ N.
ζ Cancri; I. 24. and III. 19; H. and S. 90;
continued.

Sir W. HERSCHEL, no measures could be procured, which is much to be regretted.

The evidence for the motion of the more distant star C will be found in the Philosophical Transactions, 1824, Part III. p. 115. The change of quadrant—the great amount of the motion (23° 42′ in 40¼ years) and the circumstance of an error to that amount, or anything like it, being perfectly impossible from the considerable distance of the stars; add, too, the regular gradations by which the change appears, from several intervening observations, to have taken place; all these considerations place the motion of the distant star beyond dispute, and the present measures confirm it, the angle 67° 55′ *sf* compared with that of 1822 (68° 17′ *sf*) indicating a motion still in the same direction. Its amount, it is true, is only — 22′ instead of — 1° 44′ which the assigned velocity would give, but this is as near a coincidence as we have a right to expect in such small quantities.

If this be really a TERNARY system connected by the mutual attraction of its parts, its perturbations will present one of the most intricate problems in physical astronomy. The difficulty will not be diminished by the circumstance of the rotations of the two small stars about the large one being (apparently at least) performed in opposite directions, being the reverse of what obtains in our planetary system, or by that of the deviations of the relative angular velocities from KEPLER's law, being such as to indicate either great masses in all the three bodies, great excentricities in their orbits, or a different law of gravity from what obtains in our system. (H.)

No. IX. R. A. $8^h\ 16'$; Decl. $25°\ 7'$ N.

υ' Cancri; II. 41; H. and S. 92.

Double; 8th and 9th magnitudes; small, blue.

Passy; April 1, 1825; Seven-feet Equatorial.

Position $= 52°\ 13'$ *nf* | 6 Obs. | Diff. $= 1°\ 28'$ } Tolerably steady.
Distance $= 6''.919$ | 6 Obs. | Diff. $= 0''.625$ }

Observed with 179, when $1\frac{1}{4}$ hour west of the meridian; the small star bears a very good illumination.

Passy; April 3, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position $= 52°\ 47'$ *nf* | 7 Obs. | Diff. $= 1°\ 16'$ } Tolerably steady.
Distance $= 6''.552$ | 5 Obs. | Diff. $= 0''.216$ }

Observed when 40 minutes west of the meridian with 181; but examined with 413, with which power both stars are beautifully defined, and are as round as possible.

Passy; April 4, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position $= 52°\ 57'$ *nf* | 7 Obs. | Diff. $= 1°\ 48'$ } Tolerably steady.
Distance $= 6''.773$ | 5 Obs. | Diff. $= 0''.553$ }

Observed with 181, when 25 minutes west of the meridian.

Passy; April 5, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position $= 51°\ 56'$ *nf* | 7 Obs. | Diff. $= 2°\ 19'$ } Unsteady.
Distance $= 6''.713$ | 5 Obs. | Diff. $= 0''.240$ }

Passy; April 8, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position $= 52°\ 35'$ *nf* | 7 Obs. | Diff. $= 1°\ 5'$ } Tolerably steady.
Distance $= 6''.718$ | 5 Obs. | Diff. $= 0''.216$ }

Mean Result.

Position $52°\ 30'$ *nf* (34 Obs.); Distance $6''.742$ (26 Obs.);
Epoch 1825.26.

No. IX. R. A. $8^h\ 16^m$; Decl. 25° 7′ N.

υ' Cancri; II. 41; H. and S. 92.

continued.

The position here given compared with that of 1822.16 (Philosophical Transactions 1824, III.) indicates a change of only −0° 17′, being smaller, it is true, in quantity than the change (−1° 35′) which ought to have taken place on the supposition of the angular velocity of −0°.514 there assigned, but in the right direction. If we recollect that the angle of 1822 is deduced from a mean of only 8 individual measures, it will not appear surprising that an error of a degree or somewhat more should have been committed in it. In such a case the coincidence of directions is in itself a confirmation as good as we have a right to look for. (H.)

No. X. R. A. $10^h\ 10^m$; Decl. 20° 45′ N.

γ Leonis; I. 28; H. and S. 113;

Double; 4th and 5th magnitudes.

Passy; April 1, 1825; Seven-feet Equatorial.

Position = 11° 43′ *sf* | 7 Obs. | Diff. = 4° 56′
Distance = 2″.476 | 6 Obs. | Diff. = 0″.505 } Rather difficult.

Observed on the meridian with 273; the stars well defined, but not steady.

Passy; April 3, 1825; Seven-feet Equatorial.

4th and 5th magnitudes.

Position = 11° 1′ *sf* | 7 Obs. | Diff. = 1° 32′
Distance = 3″.017 | 5 Obs. | Diff. = 0″.384 } On the meridian.

Observed with 413; stars very well defined but extremely unsteady, rendering the observations, particularly those of distance, difficult.

Passy; April 4, 1825; Seven-feet Equatorial.

4th and 5th magnitudes.

Position = 11° 48′ *sf* | 7 Obs. | Diff. = 2° 28′. On the meridian.

Observed with 181; the extreme unsteadiness of the stars prevents me using a higher power. No observations of distance can be procured.

No. X. R. A. $10^h\ 10^m$; Decl. 20° 45′ N.

γ Leonis; I. 28; H. and S. 113;

continued.

Passy; April 12, 1825; Seven-feet Equatorial.

4th and 5th magnitudes.

Position = 10° 27′ *sf* | 7 Obs. | Diff. = 2° 22′ } On the meridian.
Distance = 2″.765 | 5 Obs. | Diff. = 0″.432 }

Observed with 327, the deepest power which the unsteadiness of the stars allows me to use advantageously.

Passy; May 4, 1825; Seven-feet Equatorial.

4th and 5th magnitudes.

Position = 10° 7′ *sf* | 7 Obs. | Diff. = 4° 10′. Unsteady.

Observed by twilight without artificial illumination, when 15 minutes west of the meridian.

Passy; June 1, 1825; Seven-feet Equatorial.

4th and 5th magnitudes.

Position = 12° 36′ *sf* | 7 Obs. | Diff. = 1° 58′ } Unsteady.
Distance = 2″.652 | 5 Obs. | Diff. = 0″.264 }

Observed by daylight with 413, when 40 minutes west of the meridian; sun shining; not a cloud visible; stars at times well defined.

Mean Result.

Position 11° 17′ *sf* (42 Obs.); Distance 2″.716 (21 Obs.); Epoch 1825.80.

This position, compared with that of 1822.44, gives a motion of + 2° 53′. The supposition of an annual motion of + 0°.30, assigned in the former Paper, would give + 0°.54′. The present observations therefore confirm this motion fully in point of reality, and direction, but indicate an acceleration which (considering the number of observations) may have some claims to probability. The distances disagree more than might have been expected. (H.)

No. XI. R. A. 11ʰ 9ᵐ; Decl. 32° 33′ N.

ξ Ursæ majoris; I. 2; H. and S. 122; Double; 6th and 6¼ magnitudes.

Passy; February 28, 1825; Seven-feet Equatorial.

Position = 24° 53′ *sp* | 5 Obs. | Diff. = 1° 42′. Difficult.

Stars ill defined and unsteady; observed with 273.

Passy; March 7, 1825; Seven-feet Equatorial.

6½ and 7th magnitudes.

Position = 24° 57′ *sp* | 12 Obs. | Diff. = 2° 30′. Tolerably steady.

Observed when 15 minutes west of the meridian with 273; stars well defined.

Passy; March 20, 1825; Seven-feet Equatorial.

6th and 6¼ magnitudes.

Position = 25° 18′ *sp* | 4 Obs. | Diff. = 1° 35′
Distance = 2″.029 | 5 Obs. | Diff. = 0″.481 } Mons. Bouvard.

Position = 25° 11′ *sp* | 6 Obs. | Diff. = 2° 35
Distance = 2″.009 | 5 Obs. | Diff. = 0″.264 } South.

Observed when a few minutes east and west of the meridian with 273, but during the measures of distance extremely unsteady.

Passy; March 21, 1825; Seven-feet Equatorial.

6½ and 7th magnitudes.

Position = 25° 1′ *sp* | 7 Obs. | Diff. = 2° 0′
Distance = 2″.572 | 5 Obs. | Diff. = 0″.673 } On the meridian.

Night hazy, stars tolerably steady, and are separated with a power of 179, with which the observations were procured.

Passy; April 3, 1825; Seven-feet Equatorial.

6th and 6¼ magnitudes.

Position = 25°22 *sp* | 7 Obs. | Diff. = 1° 58′ } Well defined,
Distance = 2″.368 | 5 Obs. | Diff. = 0″.2165 } but unsteady.

Observed with 413, when 45 minutes west of the meridian.

Passy; April 11, 1825; Seven-feet Equatorial.

6½ and 7th magnitudes.

Position = 26° 12′ *sp* | 7 Obs. | Diff. = 2° 45′ Observed with 181.
Position = 26° 51′ *sp* | 7 Obs. | Diff. = 0″.44 } . . . . . with 413.
Distance = 2″.387 | 5 Obs. | Diff. = 0″.601 }

The position obtained with 181 was taken when the stars were 10 minutes east of the meridian, and the observations with 413 when they were 10 minutes west of it.

No. XI. R. A. $11^h\ 9^m$; Decl. 32° 33′ N.
ξ Ursæ majoris; I. 2; H. and S. 122.
continued.

Mean Result.

Position 25° 28′ *s p* (55 Obs.); Epoch 1825.22;
Distance 2″.442 (15 Obs); Epoch 1825.25.

In taking the mean the distances of March 20 are rejected; if not rejected, the mean of the 25 observations will give distance 2″.273.

Nothing can be more satisfactory than the confirmation these observations afford of the rapid motion ascribed to this remarkable star. In the interval of 1.97 year since the Epoch 1823.29 the motion has amounted to no less than 13° 55′, in the direction *n p s f*, or — 7°.025 per annum. The sudden diminution of velocity is however not confirmed. Indeed it rested on too short an interval, and on too few observations (for such very close stars) to deserve great confidence. We cannot do better than recommend this star for the next 10 or 20 years to the *constant* and careful measurement of astronomers; nor can we too strongly inculcate here the indispensable necessity of multiplying extremely their measures of position, to eliminate those errors of judgment to which the most experienced observers are liable in measures of this sort. This done, there is no doubt of our arriving at a precise knowledge of the elements and position of the orbit described by each about their common centre of gravity; and the question of the extension or non-extension of the NEWTONIAN law of gravity to the sidereal heavens—the next great step which physical astronomy has yet to make—will be effectually decided. (H.)

No. XII. R.A. $12^h\ 13^m$; Decl. 6° 19′ N.

17 Virginis; IV. 50; H. and S. 142.

Double; 7th and 11th magnitudes.

Passy; April 3, 1825; Seven-feet Equatorial.

Position = 66° 46′ *np*	7 Obs.	Diff. = 2° 35′	Unsteady.
Distance = 19″.795	5 Obs.	Diff. = 0″.625	Very unsteady.

Measures extremely difficult, on account of light clouds: the angles were gotten when the stars were on the meridian; but no observations of distance could be procured till they were 40 minutes west of it.

Passy; April 4, 1825; Seven-feet Equatorial.

8th and 12th magnitudes.

Position = 65° 43′ *np*	7 Obs.	Diff. = 1° 15′	Very difficult.
Distance = 19″.974	5 Obs.	Diff. = 1″.034	Extremely difficult.

Passy; April 29, 1825; Seven-feet Equatorial.

8th and 11th magnitudes.

Position = 66° 7′ *np*	7 Obs.	Diff. = 1° 42′	Measures of consi-
Distance = 19″.596	5 Obs.	Diff. = 0″.408	derable difficulty.

Passy; May 10, 1825; Seven-feet Equatorial.

Position = 66° 25′ *np*	7 Obs.	Diff. = 1° 47′	Very difficult.
Distance = 20″.274	5 Obs.	Diff. = 1″.491	Extremely difficult.

Mean Result.

Position 66° 15′ *np* (28 Obs.); Distance 19″.910 (20 Obs.); Epoch 1825.30.

The difficulty of the measures of this star is no doubt the reason of the disagreement between the result (69° 36′ *np*) of the observations of 1823, and the present. The discordance however is unfortunately such as to prevent any certain conclusion as to the motion or rest of the stars from being drawn. (H.)

No. XIII. R. A. $12^h\ 32^m$; Decl. $0°\ 27'$ S.

γ Virginis; III. 18; H. and S. 150.

Double; 8th and $8\frac{1}{2}$ magnitudes.

Passy; April 3, 1825; Seven-feet Equatorial.

Position $= 7°\ 22'\ sf$	7 Obs.	Diff. $= 3°\ 12'$	Unsteady.
Distance $= 3''.287$	5 Obs.	Diff. $= 0''.312$	

The angles were observed with 413; but the distances with 181 only, in consequence of the unsteadiness of the stars, which were at the time of observation a few minutes west of the meridian.

Passy; April 4, 1825; Seven-feet Equatorial.

Position $= 6°\ 42'\ np$	5 Obs.	Diff. $= 2°\ 20'$	Very unsteady.
Distance $= 3''.152$	5 Obs.	Diff. $= 0''.601$	

The stars are of the 8th and $8\frac{1}{2}$ magnitudes. I tried to use a higher power than 181, but could not do it advantageously.

Passy; May 14, 1825; Seven-feet Equatorial.

8th and $8\frac{1}{2}$ magnitudes.

Position $= 6°\ 55'\ np$	7 Obs.	Diff. $= 1°\ 9'$	. . . .
Distance $= 3''.325$	5 Obs.	Diff. $= 0''.456$	

Observed when on the meridian; stars tolerably well defined, but unsteady.

Passy; May 31, 1825; Seven-feet Equatorial.

$8\frac{1}{2}$ and 9th magnitudes.

Position $= 6°\ 34'\ np$	7 Obs.	Diff. $= 0°\ 51'$	Very unsteady.
Distance $= 3''.289$	5 Obs.	Diff. $= 0''.481$	

Stars one hour west of the meridian; at times tolerably well defined.

Mean Result.

Position $6°\ 53'\ np$ (28 Obs.); Distance $3''.263$ (20 Obs.); Epoch 1825.32.

These observations confirm the motion attributed to the stars of γ Virginis, and point out an acceleration in it, even more strongly than has been insisted upon in a former paper. This will appear by assembling all the observations with their epochs, as follows:

No. XIII. R. A. $12^h\ 32^m$; Decl. 0° 27′ S.
γ Virginis; III. 18; H. and S. 150.
continued.

Epoch.	Position.	Interval.	Angle described.	Angular velocity deduced.
	°			°
1756.0	54.4 *np*	25.9	13.7	— 0.528
1781.9	40.7	21.3	10.4	— 0.490
1803.2	30.3	17.0	15.0	— 0.882
1820.2	15.3	2.1	1.9	— 0.905
1822.3	13.4	3.0	6.5	— 2.167
1825.3	6.9			

This star therefore ought to be narrowly watched, as it should seem that the two component stars are mutually approaching to their perihelion, or at least to their situation of maximum angular velocity. (H.)

No. XIV. R. A. $12^h\ 32^m$; Decl. 12° 1′ S.
58 (Bode) Corvi; 145. 38; H. and S. 149.
Double; equal; each of the 8th magnitude.

Passy; April 11, 1825; Seven-feet Equatorial.

Position = 31° 23′ *np* or *sf* | 5 Obs. | Diff. = 2° 3′
Distance = 6″.244 | 5 Obs. | Diff. = 0″.264 } Unsteady.

Passy; April 12, 1825; Seven-feet Equatorial.
8th and 8½ magnitudes.

Position = 31° 32′ *np* | 5 Obs. | Diff. = 0° 47′
Distance = 5″.910 | 5 Obs. | Diff. = 0″.288 } Unsteady.

Mean Result.

Position 31° 27′ *np* or *sf* (10 Obs.); Distance 6″.077 (10 Obs.);
Epoch 1825.28.

When this star was measured, I was not aware that observations of it by Mr. Herschel and myself had been communicated to the Royal Society. Our joint result was,

Position 29° 26′ *sf*; Distance 6″.881; Epoch 1823.31.

No. XV. R. A. $14^h\ 37^m$; Decl. 27° 51′ N.

ε Bootis; I. 1; H. and S. 185.

Double; 2nd and 9th magnitudes.

Blackman-street; June 18, 1824; Five-feet Equatorial.

Position = 55° 25′ *np* | 5 Obs. | Diff. = 2° 45′. Very satisfactory.

Observations made by strong twilight, without artificial illumination of the wires. The evening remarkably favourable; stars extremely steady, and distant from the meridian 20 minutes.

Passy; May 27, 1825; Seven-feet Equatorial.

2nd and 9th magnitudes.

Position = 55° 58′ *np* | 7 Obs. | Diff. = 3° 19′
Distance = 3″.713 | 5 Obs. | Diff. = 0″.505 . . . .

Passy; May 31, 1825; Seven-feet Equatorial.

Position = 55° 30′ *np* | 7 Obs. | Diff. = 3° 4. Rather difficult.

Observations of distance impracticable, on account of the unsteadiness of the stars.

Passy; June 1, 1825; Seven-feet Equatorial.

2nd and 9th magnitudes.

Position = 53° 40′ *np* | 7 Obs. | Diff. = 1° 42′
Distance = 3″.565 | 5 Obs. | Diff. = 0″.456 } Difficult.

Stars tolerably well defined, and on the meridian, but are very unsteady.

Passy; June 9, 1825; Seven-feet Equatorial.

2nd and 9th magnitudes.

Position = 54° 58′ *np* | 7 Obs. | Diff. = 2° 26′
Distance = 3″.368 | 5 Obs. | Diff. = 0″.505 } Steady.

Passy; June 13, 1825; Seven-feet Equatorial.

2nd and 9th magnitudes.

Position = 53° 28′ *np* | 7 Obs. | Diff. = 2° 52′ } Observed with 181.
Position = 53° 17′ *np* | 7 Obs. | Diff. = 2° 23′ } ——— 327.
Distance = 3″.007 | 5 Obs. | Diff. = 0″.336 } ——— 181.

Stars admirably defined. I never observed this difficult double star under more favourable circumstances: the results are entitled to very considerable confidence: the observations were procured when the star was a few minutes on either side of the meridian.

No. XV. R. A. $14^h\ 37^m$; Decl. 27° 51′ N.

ρ Bootis; I. 1; H. and S. 185.

continued.

Passy; June 14, 1825; Seven-feet Equatorial.

2nd and 9th magnitudes.

Position = 53° 35′ *np*	7 Obs.	Diff. = 2° 36′	Rather difficult.
Distance = 3″.126	5 Obs.	Diff. = 0″.529	Difficult.

Observed with 181; stars on the meridian and well defined, but are not steady.

Mean Result.

Position 55° 25′ *np* (5 Obs.); Epoch 1824.47;
Position 54° 21′ *np* (49 Obs.); Epoch 1825.43;
Distance 3″.356 (25 Obs.); Epoch 1825.44.

Taking the means of the above angles and epochs, allowing each a weight proportional to the number of measures on which it rests, we get for the mean Epoch 1825.34 the angle of position 54° 26′ *np*. This, compared with the measures of 1822, gives + 1° 27′ for the observed motion in the interval of 2.79 years. The motion computed on a supposition of + 0°.4378 per annum assigned in a former paper, should be + 1° 14′, differing insensibly from that actually found by observation. The motion of this star is therefore very satisfactorily confirmed both in direction and quantity; and when we reflect on the extreme difficulty of it (in respect of position), this will serve to give great confidence in results which depend on a great number of measures, however wide of the mark individual measures may be. (H.)

No. XVI. R. A. $14^h\ 43^m$; Decl. 19° 51′ N.
ξ Bootis; II. 18; H. and S. 187.
Double; 6th and 8th magnitudes.

Passy; April 3, 1825; Seven-feet Equatorial.

Position = 66° 22′ *np*	7 Obs.	Diff. = 1° 56′	Very unsteady.
Distance = 7″.668	6 Obs.	Diff. = 0″.721	

Observed when 40 minutes east of the meridian.

Passy; May 27, 1825; Seven-feet Equatorial.
7th and 10th magnitudes.

Position = 68° 16′ *np*	7 Obs.	Diff. = 1° 54′	Unsteady.
Distance = 7″.814	5 Obs.	Diff. = 0″.673	

Observed on the meridian; but the night is unfavourable.

Passy; May 31, 1825; Seven-feet Equatorial.
6th and 8th magnitudes.

Position = 67° 3′ *np*	7 Obs.	Diff. = 1° 0′	Very unsteady.
Distance = 7″.949	5 Obs.	Diff. = 0″.481	

Observed on the meridian.

Passy; June 1, 1825; Seven-feet Equatorial.
6½ and 9th magnitudes.

Position = 66° 16′ *np*	7 Obs.	Diff. = 2° 3′	Unsteady.
Distance = 7″.672	5 Obs.	Diff. = 0″.889	

Observed with 181; stars on the meridian, and at times well defined; a power of 413 showed the larger of the two stars as round as possible.

Mean Result.

Position 67° 0′ *np*; Distance 7″.776; Epoch 1825.37.

In the former communication (Phil. Tran. 1824. III.) it is remarked that the continuance or decrease of the then angular velocity of about 1° per annum for a few years, would decide the question of rectilinear or orbitual motion. The present observations, then, go a great way towards deciding this interesting question, as, so far from indicating any retardation, their tendency lies the other way. In fact, (supposing them free from error), no less than — 3° 54′ have been described in 2.74 years, being at the rate of — 1°.420 per annum. This star therefore merits peculiar attention, as the great variation of its distance gives reason to suppose a great ellipticity, or considerable inclination of its orbit. (H.)

No. XVII. R. A. $15^h\ 18^m$; Decl. 38° 1′ N.

s f μ Bootis; I. 17; H. and S. 203.

Double; 8th and 10th magnitudes.

Passy; June 12, 1825; Seven-feet Equatorial.

Position = 64° 14′ *n p* | 7 Obs. | Diff. = 1° 29′ | Difficult.

Observed when on the meridian with 327: I could not obtain any measures of distance, on account of the extreme unsteadiness of the stars.

Passy; June 13, 1825; Seven-feet Equatorial.

9th and 10th magnitudes.

Position = 63° 32′ *n p* | 7 Obs. | Diff. = 3° 9′
Distance = 1″.396 | 5 Obs. | Diff. = 0″.432 } Difficult.

Observed with 327, when on the meridian. Measures satisfactory.

Passy; June 17, 1825; Seven-feet Equatorial.

8½ and 10th magnitudes.

Position = 63° 23′ *n p* | 7 Obs. | Diff. = 3° 39′
Distance = 1″.377 | 5 Obs. | Diff. = 0″.408 } Easy.

Observed with 327: stars well defined, and 35 minutes east of the meridian.

Passy; June 19, 1825; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position = 63° 25′ *n p* | 7 Obs. | Diff. = 2° 11′
Distance = 1″.573 | 5 Obs. | Diff. = 0″.312 } Not difficult.

Stars on the meridian, and admirably defined. Measures obtained with 327, and considered very satisfactory.

Passy; June 23, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 63° 7′ *n p* | 7 Obs. | Diff. = 1° 30′
Distance = 1″.339 | 5 Obs. | Diff. = 0″.336 } Difficult.

Observed with 327; stars on the meridian, but very unsteady.

Mean Result.

Position 63° 32′ *n p* (35 Obs.); Distance 1″.421 (20 Obs.);
Epoch 1825.48.

These measures, compared with those of 1823, give a motion of only —0° 10′ instead of —1° 6′, which calculation

No. XVII. R. A. $15^h\ 18^m$; Decl. 38° 1′ N.

s f μ Bootis; I. 17; H. and S. 203.

continued.

would assign. The direction however is right; and as the errors required to produce this discrepancy would be very small, we may combine both series of observations for a mean epoch, which will give,

Epoch 1824.61; Position 63° 36′ *n p*.

Difference of Declination of μ Bootis and of the larger of the two stars forming the close double star which is *s f* it,

Passy; June 21, 1825; Seven-feet Equatorial.

Difference of declin. = 1′ 47″.314 | 6 Obs. | Diff. = 0″.793.

Observed when on the meridian with 327; but the stars very unsteady.

Passy; June 23, 1825; Seven-feet Equatorial.

Difference of declin. = 1′ 47″.199 | 7 Obs. | Diff. = 1″.106.

Observed on the meridian with 327; the stars very unsteady.

Passy; July 2, 1825; Seven-feet Equatorial.

Difference of declin. = 1′ 47″.610 | 7 Obs. | Diff. = 0″.336.

Observed on the meridian with 181, which power during twilight completely separates the two stars of the close double star. Observed without artificial illumination of the micrometer wires; stars very steady; measures satisfactory.

Mean Result.

Difference of Declination 1′ 47″.377 (20 Obs.); Epoch 1825.48.

The mean of 12 observations taken July 9, 1823, with the Five-feet Equatorial, was 1′ 46″.962, differing only 0″.415 from the present determination.

No. XVIII. R. A. $15^h\ 26^m$; Decl. 11° 9′ N.

δ Serpentis; I. 42; H. and S. 205.

Double; 8th and 9th magnitudes.

Passy; April 3, 1825; Seven-feet Equatorial.

Position = 74° 5′ *sp* | 7 Obs. | Diff. = 2° 22′ } Unsteady, and ill
Distance = 3″.287 | 5 Obs. | Diff. = 0″.384 } defined.

Observed with 413, when 20 minutes east of the meridian.

Passy; June 12, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 70° 41′ *sp* | 7 Obs. | Diff. = 3° 4′. Rather difficult.

Observed on the meridian; but the stars are so extremely unsteady, that to obtain measures of distance is impracticable.

Passy; June 13, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 68° 32′ *sp* | 7 Obs. | Diff. = 2° 25′ } Tolerably steady.
Distance = 3″.325 | 5 Obs. | Diff. = 0″.505 }

Observed with 327 on the meridian. Night rather favourable.

Passy; June 14, 1825; Seven-feet Equatorial.

Small, decidedly light blue.

Position = 70° 53′ *sp* | 7 Obs. | Diff. = 0° 34′ } With 181.
Distance = 3″.390 | 5 Obs. | Diff. = 0″.360 }

Observed on the meridian; stars rather unsteady.

Passy; June 16, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 69° 35′ *sp* | 7 Obs. | Diff. = 2° 10′ } With 181.
Distance = 3″.268 | 5 Obs. | Diff. = 0″.216 }

Passy; June 19, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 69° 23′ *sp* | 7 Obs. | Diff. = 2° 24′ } Rather steady.
Distance = 3″.072 | 5 Obs. | Diff. = 0″.216 }

Observed with 327 on the meridian. Night tolerably favourable.

Mean Result.

Position 69° 49′ *sp* (35 Obs.); Epoch 1825.46.

Distance 3″.268 (25 Obs.); Epoch 1825.42.

In taking the mean, the position observed April 3 is rejected.

No. XVIII. R. A. $15^h\ 26^m$; Decl. 11° 9′ N.

δ Serpentis; I. 42; H. and S. 205.

continued.

Either there is a considerable error in these or the measures of 1821, or the result is unfavourable to the motion assigned to this star, as, instead of advancing 3° in its apparent orbit, it seems actually to have receded nearly 50′. Further observations must elucidate this difficulty. (H.)

No. XIX. R. A. $15^h\ 54^m$; Decl. 10° 52′ S.

ξ Scorpii; I. 33 and II. 20; H. and S. 216.

Double; 6th and 9th, or 10th magnitudes; small, decidedly blue.

Passy; June 14, 1825; Seven-feet Equatorial.

Position = 12° 36′ *nf* | 7 Obs. | Diff. = 1° 37′ } Unsteady.
Distance = 7″.290 | 5 Obs. | Diff. = 0″.745 }

Observed on the meridian with 181.

Passy; June 16, 1825; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = 14° 27′ *nf* | 7 Obs. | Diff. = 2° 14′ } Unsteady.
Distance = 6″.946 | 5 Obs. | Diff. = 0″.673 }

Observed with 181; stars on the meridian.

Passy; June 17, 1825; Seven-feet Equatorial.

6th and 9th magnitudes.

Position = 13° 50′ *nf* | 7 Obs. | Diff. = 1° 52′ } Unsteady, but well
Distance = 6″.975 | 5 Obs. | Diff. = 0″.240 } defined.

Observed on the meridian with 181.

Passy; June 18, 1825; Seven-feet Equatorial.

6th and 9th magnitudes.

Position = 12° 27′ *nf* | 7 Obs. | Diff. = 2° 23′. Tolerably steady.

Observed by Mons^r. ARAGO on the meridian, with a power of 181.

Mean Result.

Position 13° 29′ *nf*; Distance 7″.070; Epoch 1825.46.

No. XIX. R. A. $15^h\ 54^m$; Decl. 10° 52′ S.
ξ Scorpii; I. 33 and II. 20; H. and S. 216.
continued.

Triple; A and B equal; each of the 7th magnitude; C of the 9th.

Measures of the close pair A B.

Passy; June 19, 1825; Seven-feet Equatorial.

Position = 84° 43′ *sf* or *np* | 5 Obs. | Diff. = 2° 3′. Unsteady.

In the former communication ξ Scorpii was only observed as a double star; Sir W. HERSCHEL however having described it as triple, I have examined it several times with reference to this point; but the extreme unsteadiness of the stars, particularly those of low altitudes, during several weeks past, has precluded the use of high magnifying powers. This evening the stars being more tranquil, a power of 327 was applied, and an elongation of the large star was at times suspected: 413 confirmed the suspicion, but was inadequate to separate the two stars. The angles here given were obtained with 513, with which the discs of the stars seemed in contact; but their extreme unsteadiness under this magnifying power rendered all attempts to procure measures of distance abortive; and the position, from this circumstance, must be regarded with some distrust. The stars have the same colour, and were observed on the meridian.

Passy; June 21, 1825; Seven-feet Equatorial.

Each of the 7th magnitude.

Position = 81° 48′ *np* or *sf* | 5 Obs. | Diff. = 6° 22′. Extremely difficult.

Three of the angles were gotten with 512, the other two with 413. The extreme unsteadiness of the stars rendered the observations so unsatisfactory, that I consider them as little else than approximations. Observed on the meridian.

No. XIX. R. A. $15^h\ 54^m$; Decl. $10°\ 52$ S.

ξ Scorpii; I. 33 and II. 20; H. and S. 216.

continued.

Measures of the close pair A B.

Passy; June 23, 1825; Seven-feet Equatorial.

6th and 7th magnitudes.

Position $= 80°\ 14'\ sf$ | 7 Obs. | Diff. $= 1°\ 58'$
Distance $= 1''.032$ | 6 Obs. | Diff. $= 0''.432$ } Extremely difficult.

Observed on the meridian with 413; stars unsteady; yet I never saw them so well defined.

Passy; June 29, 1825; Seven-feet Equatorial.

6th and $6\frac{1}{2}$ magnitudes.

Position $= 82°\ 26'\ sf$ | 7 Obs. | Diff. $= 1°\ 59'$
Distance $= 1''.272$ | 5 Obs. | Diff. $= 0''.264$ } Difficult.

Observed on the meridian with 413; stars perfectly round: a black division between them seen distinctly. The measures I consider good, and were gotten with less difficulty than either of the preceding sets. Evening very favourable; stars unusually steady.

Passy; June 30, 1825; Seven-feet Equatorial.

7th and $7\frac{1}{2}$ magnitudes.

Position $= 82°\ 57'\ sf$ | 7 Obs. | Diff. $= 3°\ 10'$. Extremely difficult.

Observed when a few minutes east of the meridian with 413; stars at times well defined: light clouds and extreme unsteadiness, render it impossible for me to procure measures of distance, nor can any observations of A, or B, with the more distant star C, be obtained.

Passy; July 2, 1825; Seven-feet Equatorial.

7th and $7\frac{1}{2}$ magnitudes.

Position $= 82°\ 48'\ sf$ | 7 Obs. | Diff. $= 3°\ 21'$
Distance $= 1''.678$ | 5 Obs. | Diff. $= 0''.192$ } Unsteady.

Observed with 413, when 5 minutes east of the meridian; angles very difficult; distances extremely difficult.

Passy; July 4, 1825; Seven-feet Equatorial.

8th and $8\frac{1}{2}$ magnitudes.

Position $= 79°\ 33'\ sf$ | 7 Obs. | Diff. $= 3°\ 45'$
Distance $= 1''.394$ | 5 Obs. | Diff. $= 0''.240$ } Very unsteady.

Observed when 10 minutes west of the meridian with a power of 413; measures very difficult.

No. XIX. R. A. $15^h\ 54^m$; Decl. 10° 52′ S.

ξ Scorpii; I. 33 and II. 20; H. and S. 216.

continued.

Measures of the close pair A B.

Passy; July 8, 1825; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 81° 34′ *sf*	7 Obs.	Diff. = 5° 13′	Very unsteady.
Distance = 1″.477	5 Obs.	Diff. = 0″.192	

Observed by twilight with 413, when 15 minutes east of the meridian. Measures very difficult.

Measures of A C.

Passy; June 23, 1825; Seven-feet Equatorial.

Position = 9° 39′ *nf*	7 Obs.	Diff. = 2° 19′	Very difficult.
Distance = 7″.043	5 Obs.	Diff. = 0″.168	

Observed with 413; but the measures are very difficult, because the distant blue star C does not bear so high a magnifying power; indeed it is so very indistinct, that it is seen only with great attention.

Passy; June 29, 1825; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = 8° 1′ *nf* | 7 Obs. | Diff. = 1° 8′. Remarkably steady.

Observed when 10 minutes west of the meridian with 413; the measures are difficult, because the star C is extremely indistinct with this power. I think the measures very good.

Passy; July 2, 1825; Seven-feet Equatorial.

7th and 10½ magnitudes.

Position = 9° 17′ *nf*	7 Obs.	Diff. = 1° 47′	Extremely difficult.
Distance = 0″.857	5 Obs.	Diff. = 0″.769	

Observed when 10 minutes west of the meridian with 327, with which the discs of the two stars A and B seemed in contact: variable refraction prevented me using a higher power: the stars were at times well defined.

Passy; July 4, 1825; Seven-feet Equatorial.

7th and 10th magnitudes.

Position = 8° 49′ *nf* | 7 Obs. | Diff. = 2° 0′. Rather unsteady.

Observed by twilight with 181, which sufficiently separated the two discs of the close pair A B; stars 20 minutes east of the meridian at the time the measures were taken.

No. XIX. R. A. $15^h\ 54^m$; Decl. $10°\ 52'$ S.

ξ Scorpii; I. 33 and II. 20; H. and S. 216.

continued.

Measures of A C.

Passy; July 8, 1825; Seven-feet Equatorial.

7th and 10th magnitudes.

Position $= 9°\ 27'$ *nf* | 7 Obs. | Diff. $= 1°\ 24'$ } Very difficult.
Distance $= 6''.983$ | 5 Obs. | Diff. $= 0''.505$ }

Observed with 413. Stars at times well defined, but very unsteady.

Passy; June 29, 1825; Seven-feet Equatorial.

Measures of B C.

6½ and 10th magnitudes.

Position $= 17°\ 25'$ *nf* | 7 Obs. | Diff. $= 4°\ 15'$. Very difficult.

Observed when 20 minutes west of the meridian with 413; the position of B C is obtained with more difficulty than that of A C; and perhaps on this account the observations of the latter are scarcely so much to be relied upon, as those of the former.

Passy; July 2, 1825; Seven-feet Equatorial.

7½ and 10½ magnitudes.

Position $= 18°\ 16'$ *nf* | 7 Obs. | Diff. $= 2°\ 10'$. Extremely difficult.

Observed on the meridian with 327; stars very unsteady.

Passy; July 4, 1825; Seven-feet Equatorial.

8½ and 10th magnitudes.

Position $= 17°\ 53'$ *nf* | 7 Obs. | Diff. $= 4°\ 59'$. Very difficult.

Observed with 327 when on the meridian; stars extremely unsteady.

Passy; July 8, 1825; Seven-feet Equatorial.

8th and 10th magnitudes.

Position $= 16°\ 28'$ *nf* | 7 Obs. | Diff. $= 1°\ 25'$. Very difficult.

Observed when 10 minutes west of the meridian; stars very unsteady.

No. XIX. R. A. $15^h\ 54^m$; Decl. $10°\ 52'$ S.

ξ Scorpii; I. 33 and II. 20; H. and S. 216.

continued.

Mean Result.

of A. B. { Position $81°\ 54'$ *sf* (52 Obs.); Epoch 1825.49;
Distance $1''.358$ (26 Obs.); Epoch 1825.50.

of A C. Position $9°\ 3'$ *nf* (35 Obs.); Distance $6''.961$ (15 Obs.); Epoch 1825.50.

of B C. Position $17°\ 30'$ *nf* (28 Obs.); Epoch 1825.51.

The observations of A C when seen only as a *double* star, are not included in the mean result.

Not the slightest alteration appears to have taken place in the relative position or distance of the close stars. The angle measured by Sir W. Herschel in 1782 was $82°\ 2'$ *sf*, differing only $6'$ from the present; while the interval, estimated at $\frac{1}{4}$ or $\frac{1}{3}$ of a diameter, would correspond to a distance of about $1\frac{1}{2}''$. (H.)

No. XX. R. A. $16^h\ 4^m$; Decl. $14°\ 1'$ N.

49 Serpentis; I. 82; H. and S. 221.

Double; 8th and $8\frac{1}{2}$ magnitudes.

Passy; April 3, 1825; Seven-feet Equatorial.

Position $= 48°\ 38'$ *np* | 7 Obs. | Diff. $= 4°\ 9'$ } Observed with 413.
Distance $= 3''.734$ | 5 Obs. | Diff. $= 0''.360$ }

Stars at times well defined, but unsteady.

Passy; June 13, 1825; Seven-feet Equatorial.

8th and $8\frac{1}{2}$ magnitudes.

Position $= 47°\ 43'$ *np* | 7 Obs. | Diff. $= 2°\ 27'$ } Unsteady.
Distance $= 3''.330$ | 5 Obs. | Diff. $= 0''.336$ }

Observed on the meridian with 327; pretty well defined.

Passy; June 16, 1825; Seven-feet Equatorial.

8th and $8\frac{1}{2}$ magnitudes.

Position $= 47°\ 30'$ *np* | 7 Obs. | Diff. $= 2°\ 29'$ } Unsteady.
Distance $= 3''.440$ | 5 Obs. | Diff. $= 0''.244$ }

Observed when on the meridian with 181; tolerably good measures.

No. XX. R. A. $16^h\ 4^m$; Decl. 14° 1′ N.

49 Serpentis; I. 82; H. and S. 221.

continued.

Passy; June 19, 1825; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 48° 51′ *n p* | 7 Obs. | Diff. = 1° 28′ } Tolerably steady.
Distance = 3″.500 | 5 Obs. | Diff. = 0″.529 }

Observed on the meridian with 181; results satisfactory.

Mean Result.

Position 48° 10′ *n p* (20 Obs.); Distance 3″.501 (20 Obs.); Epoch 1825.41.

The change in this star since the last observations is such as to confirm the direction of its motion; but the quantity is more than calculation would give, amounting to no less than 6° 15′, instead of 1° 6′. This renders it probable that the measures of 1823 are erroneous,* and that Mr. STRUVE's measure in 1820 (46° 33′ *n p*) is entitled to greater confidence. The former rest on the observations of one night; and long experience has now shown, that this can never be fully depended on. (H.)

No. XXI. R. A. $16^h\ 8^m$; Decl. 34° 20′ N.

σ Coronæ; I. 3; H. and S. 222.

Double; 6th and 8th magnitudes.

Passy; April 3, 1825; Seven-feet Equatorial.

Position = 12° 18′ *n f* | 5 Obs. | Diff. = 6° 10′. Extremely difficult.

The small star only seen by glimpses. In the accuracy of the results I have no confidence. Observations of distance impracticable.

* On referring to our original manuscripts, this suggestion offered by Mr. HERSCHEL is corroborated; for on the 19th June, 1822, the star was measured by one of us, in the absence of the other, and under very favourable circumstances, the mean of eight measures (the extremes of which differed only 1° 22′) gave, POSITION 45° 33′ *n p*. As however the observations subsequently made, were so much at variance with them, it was thought advisable to give the preference to our joint result, and to suppress the other. Sloane-street, March 11, 1826.

No. XXI. R. A. $16^h\ 8^m$; Decl. 34° 20′ N.

σ Coronæ; I. 3; H. and S. 222.

continued.

Passy; June 16, 1825; Seven-feet Equatorial.

6th and 8th magnitudes.

Position = 13° 15′ *nf* | 7 Obs. | Diff. = 3° 47′ } Difficult.
Distance = 1″.484 | 5 Obs. | Diff. = 0″.216 }

Observed on the meridian with 413; stars neatly separated, but not very steady; measures taken with great care, and are considered very good.

Passy; June 17, 1825; Seven-feet Equatorial.

6½ and 8th magnitudes.

Position = 12° 45′ *nf* | 7 Obs. | Diff. = 3° 35′. Very difficult.

Observed with 413, when on the meridian; but the stars are so unsteady, that I cannot obtain any measures of distance.

Passy; June 19, 1825; Seven-feet Equatorial.

6th and 8th magnitudes.

The small star certainly not blue; it differs very little from the large star in colour.

Position = 12° 49′ *nf* | 7 Obs. | Diff. = 1° 58′. Very difficult.

Observed with 413; stars at times well defined, and are on the meridian; but their unsteadiness prevents me obtaining measures of distance.

Passy; June 23, 1825; Seven-feet Equatorial.

6th and 8th magnitudes.

Position = 11° 30′ *nf* | 7 Obs. | Diff. = 3° 28′ } Very difficult.
Distance = 1″.296 | 5 Obs. | Diff. = 0″.216 }

Observed on the meridian with 413, but the stars are very unsteady.

Passy; July 13, 1825; Seven-feet Equatorial.

7th and 8th magnitudes.

Position = 12° 17′ *nf* | 7 Obs. | Diff. = 2° 15′ } Tolerably steady.
Distance = 1″.659 | 5 Obs. | Diff. = 0″.336 }

Observed with 413, when 25 minutes west of the meridian.

No. XXI. R. A. $16^h\ 8^m$; Decl. 34° 20′ N.

σ Coronæ; I. 3; H. and S. 222.

continued.

Triple; A 6th, B 8th, and C of the 15th or 20th magnitudes.

Measures of A C.

Passy; July 2, 1825; Seven-feet Equatorial.

Position = 1° 17′ *sf* | 5 Obs. | Diff. = 1° 10′ } Steady.
Distance = 40″.949 | 3 Obs. | Diff. = 0″.889 }

Observed with 92; with a higher power I cannot distinguish the small star: the measures are so excessively difficult, that a slight error may be suspected. I have seen the small star before, but hitherto could not procure measures of it.

Passy; July 18, 1825; Seven-feet Equatorial.

6th and 15th magnitudes.

Position = 0° 1′ *sf* | 5 Obs. | Diff. = 1° 40′ } Steady.
Distance = 44″.015 | 2 Obs. | Diff. = 0″.553 }

The small star is so extremely faint, that the observations are attended with the greatest difficulty. Observed with 92; the results are very suspicious; indeed they are little else than approximations.

Mean Result.

of A B. { Position 12° 29′ *nf* (40 Obs.); Epoch 1825.44;
Distance 1″.480 (15 Obs.); Epoch 1825.49.

of A C. { Position 0° 39′ *sf* (10 Obs.); Epoch 1825.53;
Distance 42″.175 (5 Obs.); Epoch 1825.53.

The rotatory motion of this star continues in the direction previously assigned. The observations of 1821, 1823, and 1825, stand as follow:

		Intervals.	Arcs described.	Angular velocities.
1821.30	24° 45′ *nf*	2.17 years.	+ 7° 41′	+ 3°.548
1823.47	17 4 *nf*	1.97	+ 4 35	+ 2°.334
1825.44	12 29 *nf*			

No. XXI. R. A. $16^h\ 8^m$; Decl. 34° 20′ N.
σ Coronæ; I. 3; H. and S. 222.
continued.

The mean angular velocity corresponding to the whole interval is $+ 2°.964$—say 3°. The great and almost sudden increase of angular velocity from 2° to nearly 7° per annum, is not verified; and the angle 40° 0′ *nf* for 1819, on which it rests, must of necessity have been considerably in error. Now this is the very angle which, according to the table (p. 252, Phil. Trans. 1824. III.) gives a deviation of 9° 2′ from the computed place, so that the hypothesis there assumed respecting the orbit is considerably supported by the present observations. (H.)

No. XXII. R. A. $16^h\ 35^m$; Decl. 31° 56′ N.
ζ Herculis; I. 36; H. and S. 237.

Passy; July 28, 1825; Seven-feet Equatorial.

The evening being very favourable, I examined this star very attentively with the magnifying powers 181, 327, 413, 512, and 787; not the slightest appearance either of a second star, or of any elongation of ζ: with 787 it was exquisitely defined, and as round as possible.

No. XXIII. R. A. $17^h\ 3^m$; Decl. 54° 43′ N.
μ Draconis; II. 13; H. and S. 242.
Double; equal; each of the 8th magnitude.

Passy; April 3, 1825; Seven-feet Equatorial.
Distance = 4″.470 | 5 Obs. | Diff. = 0″.529. Unsteady.
Observed with 413, when 1½ hour east of the meridian; half the object-glass rendered useless by the intervention of the timbers of the observatory.

No. XXIII. R. A. $17^h\ 3^m$; Decl. 54° 48′ N.

μ Draconis; H. 13; H. and S. 242.

continued.

Passy; June 21, 1825; Seven-feet Equatorial.

Equal; each 8th magnitude.

Position = 60° 46′ *s p* or *n f*	7 Obs.	Diff. = 2° 11′	Unsteady.
Distance = 4″.453	5 Obs.	Diff. = 0″.216	

Observed when 50 minutes east of the meridian; only half of the object-glass is employed, on account of the interference of the observatory timbers. The stars however are sufficiently bright, to bear all the illumination the lamp affords, and are tolerably well defined.

Passy; June 30, 1825; Seven-feet Equatorial.

Equal; each 8½ magnitude.

Position = 61° 45′ *s p* or *n f*	7 Obs.	Diff. = 1° 34′	Tolerably steady.
Distance = 4″.255	5 Obs.	Diff. = 0″.697	

Observed with 181, when 45 minutes east of the meridian; more than half of the object-glass not in use, from the cause before adverted to. The results I consider very good.

Passy; July 13, 1825; Seven-feet Equatorial.

Equal; each 7½ magnitude.

Position = 59° 14′ *s p* or *n f*	7 Obs.	Diff. = 2° 5′	Steady.
Distance = 4″.390	5 Obs.	Diff. = 0″.577	

Observed when 50 minutes east of the meridian; one-half of the object-glass covered by the timbers of the building.

Passy; July 14, 1825; Seven-feet Equatorial.

Equal; each 8th magnitude.

Position = 61° 21′ *s p* or *n f*	7 Obs.	Diff. = 1° 37′	Very steady.
Distance = 3″.835	5 Obs.	Diff. = 0″.288	

Observed when 40 minutes east of the meridian; more than half the object-glass unemployed.

Passy; July 18, 1825; Seven-feet Equatorial.

Equal; each 8½ magnitude.

Position = 62° 5′ *s p* or *n f*	7 Obs.	Diff. = 1° 15′	Tolerably steady.
Distance = 4″.578	5 Obs.	Diff. = 0″.553	

Observed when 45 minutes east of the meridian; more than half of the object-glass is rendered useless by the interference of the observatory timbers.

No. XXIII. R. A. $17^h\ 3^m$; Decl. 54° 43′ N.

μ Draconis; II. 13; H. and S. 242.

continued.

Mean Result.

Position 61° 2′ *sp* or *nf* (35 Obs.); Epoch 1825.252;
Distance 4″.330 (30 Obs.); Epoch 1825.47.

The position of this star, as determined for the mean epoch 1820.97, is 60°.29, or 60° 18′ *sp* or *nf* (Phil. Trans. 1824, III. p. 271.) It is now 61° 2′. The change in 4.55 years is — 0° 44′, instead of — 2° 36′, which a computation founded on a mean motion of — 0°.5792 per annum would give. The determination for 1820 can however hardly be relied on for so great a degree of exactness as to bring out a precise *quantity*. The correspondence in direction is all we can expect, and is a satisfactory confirmation of the motion ascribed to this curious star. (H.)

No. XXIV. R. A. $17^h\ 4^m$; Decl. 26° 18′ S.

36 Ophiuchi; H. and S. 243.

Triple; A 6½, B 7th, and C 9th magnitudes.

Measures of A B.

6½ and 7th magnitudes.

Blackman-street; June 28, 1824; Five-feet Equatorial.

Position = 41° 19′ *sp* | 5 Obs. | Diff. = 1° 34′. Tolerably steady.

Blackman-street; July 12, 1824; Five-feet Equatorial.

6th and 6½ magnitudes.

Position = 41° 58′ *sp* | 5 Obs. | Diff. = 1° 31′ } Unsteady.
Distance = 5″.195 | 5 Obs. | Diff. = 0″.885 }

Passy; June 19, 1825; Seven-feet Equatorial.

6½ and 7th magnitudes.

Distance = 5″.260 | 5 Obs. | Diff. = 0″.505. Very unsteady.

No. XXIV. R. A. $17^h\ 4^m$; Decl. 26° 18′ S.

36 Ophiuchi; H. and S. 243.

continued.

Passy; July 2, 1825; Seven-feet Equatorial.

6½ and 7th magnitudes.

Distance = 5″.145 | 5 Obs. | Diff. = 0″.481. Very unsteady.

Passy; July 24, 1825; Seven-feet Equatorial.

6½ and 7th magnitudes.

Position = 41° 18′ *s p* | 5 Obs. | Diff. = 2° 30′. Tolerably steady.

Measures of A C.

Blackman-street; July 12, 1824; Five-feet Equatorial.

6th and 9th magnitudes.

Position = 16° 6′ *n p* | 3 Obs. | Diff. = 0° 30′
Distance = 3′ 14″.444 | 3 Obs. | Diff. = 1″.863 } Unsteady.

Passy; July 2, 1825; Seven-feet Equatorial.

7th and 9th magnitudes; small, blue.

Position = 16° 3′ *n p* | 4 Obs. | Diff. = 0° 30′
Distance = 3′ 16″.235 | 3 Obs. | Diff. = 0″.601 } Extremely unsteady.

Passy; July 8, 1825; Seven-feet Equatorial.

7th and 9th magnitudes.

Distance = 3′ 14″.924 | 7 Obs. | Diff. = 2″.236. Night become unfavourable.

Passy; July 20, 1825; Seven-feet Equatorial.

7th and 9½ magnitudes.

Position = 15° 56′ *n p* | 5 Obs. | Diff. = 0° 54′
Distance = 3′ 15″.547 | 6 Obs. | Diff. = 0″.288 } Very unsteady.

Passy; July 29, 1825; Seven-feet Equatorial.

Difference of declination = 54″.802 | 10 Obs. | Diff. = 2″.717.

Observed when 3 minutes east and west of the meridian; stars not steady.

Passy; August 1, 1825; Seven-feet Equatorial.

Difference of declination = 55″.632 | 10 Obs. | Diff. = 1″.755.

Observed on the meridian; stars tolerably steady.

Passy; August 5, 1825; Seven-feet Equatorial.

Difference of declination = 55″.855 | 10 Obs. | Diff. = 1″.563.

Observed when 5 minutes east and west of the meridian; stars very unsteady, and C very faint.

No. XXIV. R. A. $17^h\ 4^m$; Decl. 26° 18′ S.

36 Ophiuchi; H. and S. 243.

continued.

Measures of B C.

Passy; July 8, 1825; Seven-feet Equatorial.

7½ and 9th magnitudes.

Position = 17° 52′ *np* | 3 Obs. | Diff. = 0° 19′. Very faint.

Night now so cloudy, that no more observations can be procured.

Passy; July 13, 1825: Seven-feet Equatorial.

7½ and 9th magnitudes.

Position = 17° 42′ *np* | 5 Obs. | Diff. = 0° 21′
Distance = 3′ 13″.618 | 5 Obs. | Diff. = 1″.515 } Very unsteady.

Observed within a few minutes on either side of the meridian.

Passy; July 14, 1825; Seven-feet Equatorial.

7th and 9th magnitudes.

Position = 17° 41′ *np* | 5 Obs. | Diff. = 0° 14′
Distance = 3′ 12″.750 | 5 Obs. | Diff. = 0″.505 } Unsteady.

Observed when a few minutes east and west of the meridian.

Passy; July 18, 1825; Seven-feet Equatorial.

7th and 9½ magnitudes.

Distance = 3′ 14″.133 | 5 Obs. | Diff. = 0″.841. Extremely unsteady.

Observations taken when the stars were 15 minutes west of the meridian.

Passy; July 19, 1825; Seven-feet Equatorial.

7th and 9th magnitudes.

Distance = 3′ 14″.159 | 6 Obs. | Diff. = 0″.962. On the meridian.

Stars so extremely unsteady, that I could not use a higher power than 157.

Mean Result.

of A B. { Position 41° 32′ *sp* (15 Obs.); Epoch 1824.86;
Distance 5″.200 (15 Obs.); Epoch 1825.17.

of A C. Position 16° 1′ *np* (12 Obs.); Epoch 1825.19;
Distance 3′ 15″.252 (19 Obs.); Epoch 1825.27.

of B C. { Position 17° 41′ *np* (10 Obs.); Epoch 1825.53;
Distance 3′ 13″.689 (21 Obs.); Epoch 1825.54.

of A C. Difference of declination 55″.430 (30 Obs);
Epoch 1825.59.

No. XXIV. R. A. $17^h\ 4^m$; Decl. 26° 18′ S.

36 Ophiuchi; H. and S. 243.

continued.

Our former measures gave,

of A B. Position 42° 41′ *sp* or *nf*; Distance 5″.546;

of the distant star C. Position 19° 5′ *np*; Distance 3′ 0″735.

The position of C was taken relatively to the star B, and is not materially in error; the distance however is *decidedly wrong*, and must have arisen from erroneous reading of the micrometer.

Observations to connect the star A, or the northern of the two stars of 36 Ophiuchi, with the star 30 Scorpii.

Passy; July 21, 1825; Seven-feet Equatorial.

Position = 14° 25′ *nf*; single measure.
Distance = 12′ 7″.940 | 2 Obs. | Diff. = 1″.082 } Unsteady.

Observed with 157, when 15 minutes east of the meridian; some slight inaccuracy may be apprehended, as the wires when separated to so great a distance are not quite free from parallax.

Passy; July 23, 1825; Seven-feet Equatorial.

Position = 14° 27′ *nf* | 5 Obs. | Diff. = 0° 16′ }
Distance = 12′ 5″.590 | 5 Obs. | Diff. = 2″.019 } Tolerably steady.

Observed with a power of 92, when within 5 minutes on either side of the meridian

Passy; July 28, 1825; Seven-feet Equatorial.

Position = 14° 28′ *nf* | 5 Obs. | Diff. = 0° 12 }
Distance = 12′ 4″.201 | 5 Obs. | Diff. = 0″.841 } Steady.

Observed on the meridian, but the distance is too great for accuracy.

Passy; August 1, 1825; Seven-feet Equatorial.

Distance = 12′ 5″.480 | 7 Obs. | Diff. = 1″.875. Tolerably steady.

Observed when 10 minutes west of the meridian with 92.

Mean Result.

Position 14° 27′ *nf*; Distance 12′ 5″.136; Epoch 1825.57.

In taking the mean, the distance observed July 21 is rejected.

No. XXIV. R. A. $17^h\ 4^m$; Decl. 26° 18′ S.
36 Ophiuchi; H. and S. 243.
continued.

Observations to connect the star A, or the northern of the two stars of 36 Ophiuchi, with the star 30 Scorpii.

Passy; July 8, 1825; Four-feet Transit Instrument.

Difference of R. A. = 0′ 52″.40 (3 Obs.) Unsteady.

Passy; July 13, 1825; Four-feet Transit Instrument.

Difference of R. A. = 0′ 52″.45 (4 Obs.) Unsteady.

Passy; July 14, 1825; Four-feet Transit Instrument.

Difference of R. A. = 0′ 52″.47 (4 Obs.) Unsteady.

Passy; July 8, 1825; Seven-feet Equatorial.

Difference of declination = 3′ 1″.438 ± single observation. Become cloudy.

Passy; July 18, 1825; Seven-feet Equatorial.

Difference of declination = 3′ 1″.091 (6 Obs.) Diff. = 1′.683.

Observed on the meridian; stars very unsteady. Barometer 30.05 inches; Thermometer 84°.

Passy; July 19, 1825; Seven-feet Equatorial.

Difference of declination = 3′ 1″.745 (7 Obs.) Diff. = 3″.775.

Observed on the meridian; the stars so extremely unsteady, that I could only use a magnifying power of 157. Barometer 30.30 inches; thermometer 84°.

Passy; July 20, 1825; Seven-feet Equatorial.

Difference of declination = 3′.2″.142 (6 Obs.) Diff. = 2″.717.

Observed on the meridian; stars extremely unsteady. Barometer 30.34 inches. Thermometer 83°.

Mean Result.

Difference of Right Ascension (in time) 0′ 52″.444 (11 Obs.); Epoch 1825.53.

Difference of Declination 3′ 1″.653 (20 Obs.); Epoch 1825.54.

No. XXIV. R. A. 17h 4m; Decl. 26° 18′ S.
36 Ophiuchi; H. and S. 243.
continued.

Observations to connect the star A, or the northern of the two stars of 36 Ophiuchi, with the star A, or the southern of the two stars of 38 Ophiuchi.

Passy; July 21, 1825; Four-feet Transit Instrument.

Difference of R. A. = 2′ 11″.780 (5 Obs.) Unsteady, and 38 very faint.

Passy; July 23, 1825; Four-feet Transit Instrument.

Difference of R. A. = 2′ 11″.925 (4 Obs.) Very unsteady, and 38 faint.

Passy; July 25, 1825; Four-feet Transit Instrument.

Difference of R. A. = 2′ 11″.640 (5 Obs.) Tolerably steady.

Passy; July 27, 1825; Four-feet Transit Instrument.

Difference of R. A. = 2′ 11″.720 (5 Obs.) Tolerably steady.

Passy; July 21, 1825; Seven-feet Equatorial.

Difference of declin. = 5′ 25″.096 (4 Obs.) Very unsteady. Diff. = 1″.515.
Not more than 6 minutes on each side of the meridian when observed. The Barometer standing at 30.30 inches; Thermometer 74°.5.

Passy; July 24, 1825; Seven-feet Equatorial.

Difference of declination = 5′ 24″.081 (5 Obs.) Diff. = 4″.087.
Observed when within 10 minutes on either side of the meridian; stars tolerably steady.

Passy; July 25, 1825; Seven-feet Equatorial.

Difference of declination = 5′ 24″.459 (5 Obs.) Diff. = 1″.467.
Stars tolerably steady; and when observed not more than 10 minutes east and west of the meridian. Barometer 30.10 inches; Thermometer 70°.

Passy; July 27, 1825; Seven-feet Equatorial.

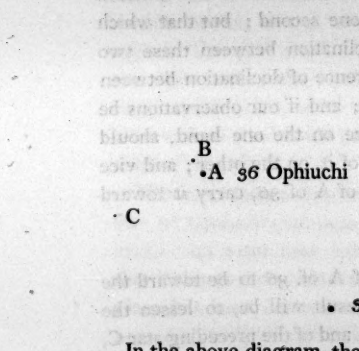
Difference of declination = 5′ 24″.004 (4 Obs.) Diff. = 2″.476.
Observed when 8 minutes on either side of the meridian. Tolerably steady.

Mean Result.

Difference of Right Ascension (in time) 2′ 11″.758 (19 Obs.);
Difference of Declination 5′ 24″.394 (18 Obs.);
Epoch 1825.56.

No. XXIV. R. A. $17^h\ 4^m$; Decl. 26° 18′ S.
36 Ophiuchi; H. and S. 243.
continued.

In the former Paper the attention of astronomers was particularly directed to this star, on account of a considerable proper motion which it was supposed to have, in common with a very distant star 30 Scorpii; and as the point is a very interesting one, the preceding observations were made, with a view of placing the matter beyond doubt: a few comments upon them will perhaps be not without their use.



In the above diagram, the close stars of A B of 36 Ophiuchi are represented relatively to the star C, to 30 Scorpii, and to A B of 38 Ophiuchi, as *seen* in the telescope; C preceding A of 36 to the north, and A of 38 following it to the south.

First, as it regards Declination.

If any proper motion of 36 exist in this direction, (supposing the star C at rest) the effect of it will be to increase, or diminish

No. XXIV. R. A. $17^h\ 4^m$; Decl. $26^\circ\ 18'$ S.
36 Ophiuchi; H. and S. 243.
continued.

the difference of declination of A C; and should A of 38 be fixed, the difference of declination of A of 36, and A of 38, will also be increased or diminished. By this mode of observing we have two chances of detecting proper motion, *each* of which will afford a *verification* of the *other*; for suppose the star A of 36 Ophiuchi to have a motion toward the south, say at the rate of one second per annum, then will the difference of declination between it and the star C to the north of it, be increased annually by one second; but that which increased the difference of declination between these two stars, should diminish the difference of declination between A of 36, and A of 38 Ophiuchi; and if our observations be correct, the increase of difference on the one hand, should be exactly equal to the decrease of it, on the other; and vice versâ, should the proper motion of A of 36, carry *it* toward the north.

Secondly, in Right Ascension.

Suppose the proper motion of A of 36 to be toward the west annually one second, the result will be, to lessen the difference of right ascension of it, and of the preceding star C, and at the same time to augment the difference of right ascension between A of 36, and A of 38; and, as before, the decrease in the one instance, should be equalled by the increase in the other; and if the proper motion of A of 36, take an easterly direction, it will be detected by consequences *opposite* to those just described, but offering similar verifications.

No. XXIV. R. A. $17^h\ 4^m$; Decl. 26° 18′ S.
36 Ophiuchi; H. and S. 243.
continued.

In the case of 61 Cygni, by following a *similar* mode of observing, (but using six stars of comparison instead of two,) I satisfied myself in a very few *months*, of the enormous proper motion of that extraordinary double star.

To those who may feel disposed thus to attack proper motion, I would hint, how indispensable it is, that their Equatorial should be well clamped, and that they should wait during the observations of difference of declination, till the earth's diurnal motion bring each of the following stars, opposite that part of the wire where the bisection of the first star was made; the results will then be charged with no instrumental error, which it is in their power to avoid: the observations also should be conducted as nearly on the meridian as possible.

When the above was written, I was not aware that the star 38 Ophiuchi had been observed since the time of FLAMSTEED; on examining however PIAZZI's catalogue, I find that it stands there under the name of 31 *Scorpii*, and that its place has been determined by 19 observations of that eminent astronomer; perhaps therefore some light may at the *present time*, be thrown upon the subject under consideration; but some corrections will be needed by our observations, to render them comparable with those, to which we are alluding.

The star 36 Ophiuchi is composed of two stars of nearly equal magnitudes, and distant from each other 5″.200; whether BRADLEY's instruments showed it double, does not appear; nor from PIAZZI's catalogue, does it seem that he saw it otherwise than as a single star; hence it is fair to

No. XXIV. R. A. $17^h\ 4^m$; Decl. 26° 18′ S.
36 Ophiuchi; H. and S. 243.
continued.

suppose, that the star was by one and the other observed as single; our observations therefore must be corrected by half the difference of declination, and by half the difference of right ascension, which with the preceding distance, and position 41° 32′ will be 1″.724 in declination, and 1″.946 on the parallel, equal to 0″.147 of right ascension in time.

For the star 38 Ophiuchi no correction of this sort will be required: its smaller star was certainly neither seen by BRADLEY nor by PIAZZI; and its magnitude, even were it at the time closer than it now is, would not sensibly alter the apparent centre of the disc of A of 38.

But the differences of declination observed by us are uncorrected for refraction: the necessary equations being applied, we get,

Diff. of decl. of A of 36 Ophiuchi & of 30 Scorpii 3′ 2″.403
. . . . . & A of 38 Ophiuchi 5′ 25″.764;

and when the corrections to reduce these results to observations of the centre of the two stars of 36 Ophiuchi are applied, the quantities become 3′ 4″.127 and 5′ 24″.040 for the differences of declination; and for differences of right ascension (in time) 52″.591 and 2′ 11″.905 respectively.

Now by BESSEL's proper motion,* the difference of declination of 36 Ophiuchi and of 30 Scorpii, Epoch 1825.57, should be 3′ 4″.930, *differing* with *our* determination only 8-*tenths* of a second: hence in declination, the two stars have either the *same*, or *no* proper motion.

But BESSEL does not give the proper motion in right ascension, for it appears that BRADLEY† did not observe the

* Vide Fundam. Astronom. page 311.

† In BRADLEY's *published* observations I have not met with any observed R. A. of 30 Scorpii, nor have I found any observation of 38 Ophiuchi, in the manuscript

No. XXIV. R. A. $17^h\ 4^m$; Decl. 26° 18′ S.

36 Ophiuchi; H. and S. 248.

continued.

transits of both stars; PIAZZI however, by a comparison of his own observations with those of preceding astronomers, assigns to them quantities, which for 1825.57 would give difference of R. A. (in time) 52″.50, *agreeing* with *our* determination to 9-hundredths of a second; hence also in R. A. as well as in declination, they have, *if any*, the *same* proper motion.

If however the proper motions attributed to them be correct, and if *none* be enjoyed by A of 38 Ophiuchi, the difference of declination between 36 and 38 should be 5′ 23″.078, differing not *one* second from *our* determination: and if the proper motion in right ascension attributed to 36 be correct (the star 38 being fixed), the difference of R. A. (in time) between them should be 2′ 11″.76 only *fourteen hundredths* of a second, at variance with *our* observations; quantities which may be very fairly attributed to errors of observation.

Hence it follows, that the two stars 36 Ophiuchi and 30 Scorpii, although distant from each other more than 12 minutes, are journeying *together* through space; and that the annual proper motions (1″.0756 and 1″.1155 toward the south, and 0″.59 and 0″.58 toward the west), assigned to them, are *true*.

From the above investigation we also learn, that the star 38 Ophiuchi has no sensible proper motion; consequently the observed increase of distance between it and the small star,* if it exist, must probably be sought for, in some peculiarity of the latter.

mass of his observations, (copied from the original possessed by the University of Oxford,) by GAEL MORRIS, and now in the library of the Royal Society: that *any* observation of this illustrious Astronomer, "le Modèle des Observateurs" of LA PLACE, and whose observations, (in the emphatic language of the same Philosopher) constitute "l'époque d'où l'on doit partir maintenant, dans les recherches délicates de la science," should be recorded *only* in *perishing manuscript*, is to be hoped in these enlightened times, will not remain long an object of regret to Astronomers.

* Referred to in page 209.

No. XXV. R. A. $17^h\ 8^m$; Decl. $25°\ 3'$ N.

δ Herculis; V. 1; H. and S. 246.

Double; 4th and 10th magnitudes; small, blue.

Passy; June 21, 1825; Seven-feet Equatorial.

Position = 83° 26′ *sf*	7 Obs.	Diff. = 1° 25′	Not steady.
Distance = 26″.534	5 Obs.	Diff. = 1″.010	

Observed on the meridian; night not very favourable.

Passy; June 30, 1825; Seven-feet Equatorial.

5th and 10th magnitudes.

Position = 83° 52′ *sf*	7 Obs.	Diff. = 1° 30′	Unusually steady.
Distance = 26″.659	5 Obs.	Diff. = 0″.697	

Observed on the meridian; the small star is blue, and bears a very good illumination. The night is extremely favourable: in the results I have the greatest confidence.

Passy; July 1, 1825; Seven-feet Equatorial.

5th and 10th magnitudes.

Position = 83° 42′ *sf*	7 Obs.	Diff. = 0° 51′	Very steady.
Distance = 26″.699	5 Obs.	Diff. = 0″.697	

Small star decidedly blue, and bears a very good illumination. Observations made when on the meridian, and are extremely satisfactory.

Passy; July 4, 1825; Seven-feet Equatorial.

5th and 9th magnitudes.

Position = 83° 12′ *sf*	7 Obs.	Diff. = 1° 35′	Tolerably steady.
Distance = 26″.883	5 Obs.	Diff = 0″.432	

Observed when 25 minutes west of the meridian.

Mean Result.

Position 83° 33′ *sf* (28 Obs.); Distance 26″.694 (20 Obs.); Epoch 1825.50.

The change stated to have taken place in this star is confirmed by the present observations; according to which, compared with those of 1821, a motion of + 1° 23′ in angle, and — 2″.175 in distance, has taken place since our former measures. This is a remarkable verification of the relative motion both in position and distance; and as the change is contrary to what the presumed proper motion of the large star would alone produce, this star merits particular attention. (H.)

No. XXVI. R. A. $17^h\ 56^m$; Decl. $2^\circ\ 33'$ N.

70 p Ophiuchi; II. 4; H. and S. 258.

Double; $7\frac{1}{2}$ and $8\frac{1}{2}$ magnitudes.

Passy; April 3, 1825; Seven-feet Equatorial.

Position $= 55^\circ\ 51'$ *sf*	7 Obs.	Diff. $= 2^\circ\ 25'$	Unsteady.
Distance $= 4''.843$	6 Obs.	Diff. $= 0''.553$	Difficult.

Observed when $1^h\ 40'$ east of the meridian; the angles are perhaps as good as can be expected at so great a distance from the meridian: the distances, on account of unsteadiness of the stars, were gotten with considerable difficulty, and probably are a little liable to suspicion.

Passy; May 3, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position $= 52^\circ\ 3'$ *sf*	7 Obs.	Diff. $= 1^\circ\ 44'$	$1\frac{1}{4}$ hour east of the meridian.
Position $= 51^\circ\ 57'$ *sf*	7 Obs.	Diff. $= 1^\circ\ 43'$	$1\frac{1}{3}$ hour . . . . .

The first set obtained with 181; the second set with 413; the night unfavourable; the stars neither well defined nor steady; indeed the weather is become very bad for delicate observations.

Passy; June 23, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position $= 58^\circ\ 50'$ *sf*	7 Obs.	Diff. $= 4^\circ\ 58'$.	On the meridian.

Stars extremely ill defined and very unsteady; so much so that I do not consider the results entitled to the least confidence; measures of distance altogether impracticable; the night is beautifully clear, not a cloud visible; but the extreme unsteadiness of the stars obliges me to discontinue observing, although I do it with the greatest reluctance.

Passy; June 29, 1825; Seven-feet Equatorial.

$7\frac{1}{2}$ and 9th magnitudes.

Position $= 58^\circ\ 15'$ *sf*	7 Obs.	Diff. $= 1^\circ\ 24'$	On the meridian.
Distance $= 4''.874$	5 Obs.	Diff. $= 0''.264$	

Stars very steady and well defined; small, certainly not blue; measures are satisfactory.

Passy; June 30, 1825; Seven-feet Equatorial.

$7\frac{1}{2}$ and $8\frac{1}{2}$ magnitudes.

Position $= 57^\circ\ 13'$ *sf*	7 Obs.	Diff. $= 1^\circ\ 36'$	On the meridian.
Distance $= 4''.419$	5 Obs.	Diff. $= 0''.432$	

Stars well defined and steady; measures good.

No. XXVI. R. A. $17^h\ 56^m$; Decl. 2° 33′ N.
70 p Ophiuchi; II. 4; H. and S. 258.
continued.

Passy; July 1, 1825; Seven-feet Equatorial.
8th and 8½ magnitudes.

Position = 58° 10′ *sf* | 7 Obs. | Diff. = 1° 32 } On the meridian.
Distance = 5″.150 | 5 Obs. | Diff. = 0″.721 }

Stars very steady and well defined; measures extremely satisfactory.

Passy; July 2, 1825; Seven-feet Equatorial.
8½ and 9½ magnitudes.

Position = 58° 18′ *sf* | 7 Obs. | Diff. = 2° 8′ } Unsteady.
Distance = 4″.929 | 5 Obs. | Diff. = 0″.408 }

Observed on the meridian; stars tolerably well defined.

Passy; July 4, 1825; Seven-feet Equatorial.
8th and 9th magnitudes.

Position = 58° 7′ *sf* | 7 Obs. | Diff. = 0° 38′ } Not steady.
Distance = 4″.594 | 5 Obs. | Diff. = 0″.264 }

Observed when 8 minutes west of the meridian; pretty well defined.

Passy; July 5, 1825; Seven-feet Equatorial.
8½ and 9½ magnitudes.

Position = 57° 32′ *sf* | 7 Obs. | Diff. = 1° 41′ } On the meridian.
Distance = 4″.789 | 5 Obs. | Diff. = 0″.481 }

Stars unsteady, and occasionally very faint; light clouds passing over them.

Passy; July 13, 1825; Seven-feet Equatorial.
7½ and 8½ magnitudes.

Position = 57° 56′ *sf* | 7 Obs. | Diff. = 2° 20′ } Not very steady.
Distance = 4″.491 | 5 Obs. | Diff. = 0″.312 }

Observed when 10 minutes east of the meridian.

Mean Result.

Position 57° 48′ *sf* (63 Obs.); Epoch 1825.48;
Distance 4″.763 (41 Obs.); Epoch 1825.48.

In taking the mean, the observations of May 3 are rejected.

No. XXVI. R. A. $17^h\ 56^m$; Decl. 2° 33′ N.

70 p Ophiuchi; II. 4; H. and S. 258;

continued.

Second Series.

Passy; August 16, 1825; Seven-feet Equatorial.

7½ and 8½ magnitudes.

Position = 58° 38′ *sf* | 7 Obs. | Diff. = 2° 37′
Distance = 4″.814 | 5 Obs. | Diff. = 0″.456
} Very steady.

Observed on the meridian.

Passy; August 17, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 58° 9′ *sf* | 7 Obs. | Diff. = 1° 11′
Distance = 4″.779 | 5 Obs. | Diff. = 0″.505
} Very steady.

Observed on the meridian.

Passy; August 20, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 58° 13′ *sf* | 7 Obs. | Diff. = 1° 5′
Distance = 4″.874 | 5 Obs. | Diff. = 0″.889
} Very steady.

Observed on the meridian.

Passy; August 21, 1825; Seven-feet Equatorial.

7th and 8¼ magnitudes.

Position = 58° 41′ *sf* | 7 Obs. | Diff. = 1° 27′
Distance = 4″.714 | 5 Obs. | Diff. = 0″.336
} Very steady.

Observed on the meridian.

Passy; August 23, 1825; Seven-feet Equatorial.

7th and 8½ magnitudes.

Position = 58° 17′ *sf* | 7 Obs. | Diff. = 2° 21′
Distance = 4″.566 | 5 Obs. | Diff. = 0″.216
} Not very steady.

Passy; September 1, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 58° 32′ *sf* | 7 Obs. | Diff. = 2° 58′
Distance = 4″.864 | 5 Obs. | Diff. = 0″.360
} Tolerably steady.

Observed by twilight, without artificial illumination, when 5 minutes east of the meridian.

Mean Result.

Position 58° 25′ *sf* (42 Obs.); Distance 4″.769 (30 Obs.);
Epoch 1825.64.

No. XXVI. R. A. $17^h\ 56^m$; Decl. 2° 33′ N.

70 p Ophiuchi; II. 4; H. and S. 258;

continued.

The mean of both series, allowing each a weight proportioned to the number of measures, gives for the

Epoch 1825.56; Position 58° 3′ *sf* (105 measures.)

Distance 4″.765 (71 Obs.)

If now we collect all the observations made in the years 1821, 1822, 1823, and 1825, we find as follows:

1821.51; 66° 50′ *sf*; {Mean of HERSCHEL's, SOUTH's, and STRUVE's Obs. Phil. Trans. 1824. iii. p. 290.

1822.49; 65° 7′ *sf*; H. and S. 1822.

1823.32; 63 25 *sf*; H. and S. 1823.

1825.54; 58 3 *sf*; S. ut supra.

The intervals are 0.98, 0.83, and 2.22 years, and the Angles described respectively in them — 1°.717, — 1°.700, and — 5°.367, whence the angular velocities come out respectively — 1°.751, — 2°.050, and — 2°.418, all of them greatly below what appears to have been the velocity up to 1820, and not differing more than might fairly be expected, considering the difficulty presented by the unequal size of the stars. The last determination, considering the great number of measures it rests upon, may be regarded as entitled to great confidence, in spite of the discordant results of April 3 and May 3, 1825, which, however, whether rejected or retained, make little difference in the final mean. It was on these (unluckily), that the note at the end of the paper of 1824 was founded.

The fact of a great diminution of angular velocity then in

No. XXVI. R. A. $17^h\ 56^m$; Decl. 2° 33′ N.
70 p Ophiuchi; II. 4; H. and S. 258.
continued.

this star can hardly be doubted. But as it is inconsistent with the laws of central forces that this should take place without a corresponding increase of distance (for the angular velocity is inversely as the square of the distance in the *apparent* as well as in the *real* orbit, whatever be its position with regard to the line of sight), it becomes necessary to examine more minutely into the distances at the different epochs. It will be observed, however, that in all the interval from 1781 to 1819 we find no measure of the distance, and that the maximum of angular velocity must have taken place somewhere in this interval. (See Phil. Trans. 1824. iii. p. 290-291.) In such a case we must recur to estimations in diameters, though necessarily less to be depended on than positive measures. On re-examining Sir W. Herschel's MSS., we fortunately find the following observations, which throw considerable light on this point, and in some measure supply the deficiency of measures. It will be recollected that his *measures* of distance are always supposed to include both diameters of the stars measured.

" October 27, 1779. 3″.593. They are very difficult to
" measure, and for that reason I join also an exact
" estimation by the eye. The vacancy between them
" is $2\frac{1}{2}$ diameters of the largest—certainly more than
" two and less than 3. The smallest may be about $\frac{3}{3}$
" or $\frac{3}{5}$ of the diameter of the other. They are exactly
" in the equatorial motion; the largest goes first. The
" situation I took by letting them run along the hair."

No. XXVI. R. A. $17^h\ 56^m$; Decl. $2°\ 33'$ N.
70 p Ophiuchi; II. 4; H. and S. 258.
continued.

" May 11, 1780. 5".468; but very difficult to take, and " therefore not much to be depended on.". . . . " I am " apt to believe that this method generally gives the " distance too large."

" June 19, 1780. $1\frac{3}{3}$ diameter, or between $1\frac{1}{2}$ and $1\frac{1}{4}$ by " very exact estimation. . . . . By measures 4".375."

" August 28, 1780. 4".531. Almost 2 diameters of the " largest, which is the preceding star. The difference " in size almost 2 to 1, or $1\frac{1}{4}$ to 1."

" May 27, 1781. Much above 2 diameters of the largest " with 460."

" April 28, 1783. Above 2 diameters."

From all these observations, it is clear that the interval between the stars about the year 1780 could not be less than 2 diameters, and by a mean of all the estimations, must have been about this quantity, or rather more than less. The small star being taken at 0.6 of the diameter of the large, the distance of their centres must have been 2.8 D, and the distance, *including the diameters*, 3.6 D. Now as this distance by the mean of all the measures, was 4".492, we have D = 1".25 and 2.8 D = 3".500.

Again; we find the following observation, the only one which occurs in the interval in question.

" June 3, 1804. About $1\frac{1}{4}$ diameter of L."

This would give for the distance between the centers 2.05 D = 2".5625.

So far then as estimations by diameters can go, these

No. XXVI. R. A. $17^h\ 56^m$; Decl. 2° 33′ N.
70 p Ophiuchi; II. 4; H. and S. 258.
continued.

observations establish the point in question, viz. that a very considerable diminution of distance really accompanied the great increase of angular velocity, and that as the velocity has since diminished, the distance has actually undergone a corresponding augmentation. It is much to be regretted that the opportunity of observing this interesting object in perihelio has been lost. (H.)

No. XXVII. R. A. $18^h\ 18^m$; Decl. 0° 5′ N.
59 Serpentis (d); I. 12; H. and S. 268;
Double; 7 and $9\frac{1}{2}$ magnitudes.

Passy; July 12, 1825; Seven-feet Equatorial.

Position = 50° 12′ *np*	7 Obs.	Diff. = 2° 43′	Unsteady and ill defined.
Distance = 4″.486	5 Obs.	Diff. = 0″.601	

Observed when 10 minutes east of the meridian.

Passy; July 14, 1825; Seven-feet Equatorial.

7th and 10th magnitudes.

Position = 47° 18′ *np*	7 Obs.	Diff. = 1° 17′	Rather difficult.
Distance = 4″.369	5 Obs.	Diff. = 0″.384	

Observed when 10 minutes east of the meridian. Stars not always well defined, but are tolerably steady.

Passy; July 15, 1825; Seven-feet Equatorial.

$7\frac{1}{2}$ and 10th magnitudes.

Position = 49° 9′ *np*	7 Obs.	Diff. = 1° 58′	Rather difficult.
Distance = 4″.338	5 Obs.	Diff. = 0″.601	

Observed on the meridian. Stars neither steady nor well defined. The smaller one is blue.

Passy; July 18, 1825; Seven-feet Equatorial.

$7\frac{1}{2}$ and 10th magnitudes.

Position = 48° 19′ *np*	7 Obs.	Diff. = 3° 30′	Neither steady nor well defined.
Distance = 4″.347	5 Obs.	Diff. = 0″.601	

Observed on the meridian.

No. XXVII. R. A. $18^h\ 18^m$; Decl. $0°\ 5'$ N.

59 Serpentis (d); I. 12; H. and S. 268.

continued.

Passy; July 19, 1825; Seven-feet Equatorial.

7th and 10th magnitudes.

Position $= 47°\ 54'$ *np*	7 Obs.	Diff. $= 3°\ 5'$	Very unsteady.
Distance $= 4''.784$	5 Obs.	Diff. $= 0''.408$	

Mean Result.

Position $48°\ 34'$ *np* (35 Obs.); Distance $4''.465$ (25 Obs.); Epoch 1825.54.

These observations compared with those of 1822 certainly afford no corroboration of the idea of an approach of these stars towards each other. (H.)

No. XXVIII. R. A. $18^h\ 21^m$; Decl. $58°\ 42'$ N.

39 Draconis; I. 7; H. and S. 269.

Triple; A of the 5th, B of the 10th, and C of the 8th magnitudes.

Measures of A B.

Passy; July 14, 1825; Seven-feet Equatorial.

Position $= 84°\ 48'$ *nf*	7 Obs.	Diff. $= 3°\ 11'$	Difficult.
Distance $= 3''.782$	5 Obs.	Diff. $= 0''.937$	

Observed ½ hour west of the meridian; the small star is light blue, and bears but an indifferent illumination; stars steady, and admirably defined.

Passy; July 16, 1825; Seven-feet Equatorial.

6th and 10th, or 11th magnitudes.

Position $= 84°\ 47'$ *nf*	7 Obs.	Diff. $= 2°\ 48'$	Rather difficult.
Distance $= 3''.431$	5 Obs.	Diff. $= 0''.697$	

The measures procured when the stars were 25 minutes west of the meridian; the small one is decidedly light blue; not steady.

No. XXVIII. R. A. $18^h\ 21'$; Decl. $58°\ 42'$ N.

39 Draconis; I. 7; H. and S. 269.

continued.

Passy; July 20, 1825; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = $84°\ 7'$ *nf*	7 Obs.	Diff. = $2°\ 0'$	Unsteady.
Distance = $3''.655$	5 Obs.	Diff. = $0''.553$	

The small star is blue, and bears a tolerable illumination.

Passy; July 21, 1825; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = $84°\ 58'$ *nf*	7 Obs.	Diff. = $3°\ 58'$	Unsteady.
Distance = $3''.503$	5 Obs.	Diff. = $0''.481$	

The small star, which is light blue, bears a very tolerable illumination.

Measures of A C.

Passy; July 14, 1825; Seven-feet Equatorial.

Position = $68°\ 42'$ *nf*	5 Obs.	Diff. = $1°\ 9'$	Very steady.
Distance = $1'\ 28''.691$	5 Obs.	Diff. = $1''.659$	

Passy; July 16, 1825; Seven-feet Equatorial.

6th and 9th magnitudes.

Position = $68°\ 35'$ *nf*	5 Obs.	Diff. = $0°\ 45'$	Rather unsteady.
Distance = $1'\ 29''.301$	5 Obs.	Diff. = $0''.529$	

Observed when 10 minutes west of the meridian; a part, (perhaps a sixth) of the object-glass not in use, from the interference of the observatory timbers.

Passy; July 20, 1825; Seven-feet Equatorial.

6th and 9th magnitudes.

Position = $68°\ 32'$ *nf*	5 Obs.	Diff. = $0°\ 53'$	Unsteady.
Distance = $1'\ 28''.862$	5 Obs.	Diff. = $0''.649$	

Perhaps one-fourth of the object-glass unemployed.

Passy; July 21, 1825; Seven-feet Equatorial.

6th and 9th magnitudes.

Position = $68°\ 34'$ *nf*	5 Obs.	Diff. = $1°\ 9'$	Very unsteady.
Distance = $1'\ 28''.903$	5 Obs.	Diff. = $0''.841$	

No. XXVIII. R. A. $18^h\ 21^m$; Decl. 58° 42′ N.

39 Draconis; I. 7; H. and S. 269.

continued.

Mean Result.

of A B. { Position 84° 40′ *nf* (28 Obs.); / Distance 3″.593 (20 Obs.); } Epoch 1825.55.

of A. C. { Position 68° 36′ *nf* (20 Obs.); / Distance 1′ 28″.939 (20 Obs.); } Epoch 1825.55.

These observations afford no corroboration of the change supposed to take place in this star, but rather militate against it: the difference of 1° 25′ between their mean and that of the measures of 1823, lying the contrary way to that presumed. (H.)

No. XXIX. R. A. $18^h\ 31^m$; Decl. 38° 37′ N.

α Lyræ; V. 31; H. and S. 272.

Double; 1st and 15th magnitudes.

Passy; July 6, 1825; Seven-feet Equatorial.

Position = 43° 56′ *sf* | 5 Obs. | Diff. = 2° 45′. Excessively difficult.

Observed with 157, on the meridian.

Passy; July 23, 1825; Seven-feet Equatorial.

1st and 15th magnitudes.

Position = 44° 41′ *sf* | 7 Obs. | Diff. = 2° 52′ }
Distance = 41″.873 | 5 Obs. | Diff. = 0″.841 } Excessively difficult.

Observed on the meridian with 157.

Passy; July 24, 1825; Seven-feet Equatorial.

1st and 15th magnitudes.

Position = 42° 35′ *sf* | 7 Obs. | Diff. = 1° 48′ }
Distance = 41″.935 | 5 Obs. | Diff. = 1″.683 } Excesssively difficult.

Observed with 157; stars on the meridian, and very steady.

Passy; July 25, 1825; Seven feet Equatorial.

1st and 15th magnitudes.

Position = 44° 3′ *sf* | 7 Obs. | Diff. = 1° 12′ }
Distance = 41″.077 | 5 Obs. | Diff. = 1″.154 } Excessively difficult.

Observed on the meridian, with 157.

No. XXIX. R. A. $18^h\ 31^m$; Decl. 38° 37′ N.

α Lyræ; V. 31; H. and S. 272.

continued.

Passy; July 26, 1825; Seven-feet Equatorial.

1st and 15th magnitudes.

Position = 43° 20′ *sf* | 2 Obs. | Diff. = 1° 20′. Excessively difficult.

On the meridian, and observed with 157; the night is become cloudy; no more measures can be procured.

Passy; July 27, 1825; Seven-feet Equatorial.

1st and 15th magnitudes.

Position 42° 26′ *sf* | 7 Obs. | Diff. = 1° 35′
Distance 41″.366 | 5 Obs. | Diff. = 0″.360 } Excessively difficult.

Stars tolerably steady, and observed on the meridian with 157.

Mean Result.

Position 43° 30′ *sf* (35 Obs.); Distance 41″.563 (20 Obs.); Epoch 1825.56

There is a change of — 1° 23′ in the angle and + 0″.535 in the distance since 1822. The former is in the direction pointed out in the former paper, and agrees tolerably in quantity with that assigned. The difference of distance probably arises from error of observation. (H.)

No. XXX. R. A. $18^h\ 38^m$; Decl. 39° 27′ N.

5 Lyræ; II. 6; H. and S. 278.

Double; equal; each 8th magnitude.

Passy; July 12, 1825; Seven-feet Equatorial.

Position = 69° 6′ *sf* or *np* | 7 Obs. | Diff. = 1° 0′
Distance = 3″.438 | 5 Obs. | Diff. = 0″.408 } Satisfactory.

Stars very steady and well defined, and 20 minutes east of the meridian.

Passy; July 13, 1825; Seven-feet Equatorial.

Equal; each 8½ magnitude.

Position = 69° 0′ *sf* or *np* | 7 Obs. | Diff. = 2° 8′
Distance = 3″.299 | 5 Obs. | Diff. = 0″.192 } Very good.

Observed on the meridian; stars very steady.

No. XXX. R. A. $18^h\ 38^m$; Decl. 39° 27′ N.

5 Lyræ; II. 6; H. and S. 278.

continued.

Passy; July 15, 1825; Seven-feet Equatorial.

Equal; each 8th magnitude.

Position = 69° 21′ *np* or *sf* | 7 Obs. | Diff. = 2° 2′
Distance = 3″.318 | 5 Obs. | Diff. = 0″.384 } Very satisfactory.

Observed on the meridian; stars very steady.

Passy; July 16, 1825; Seven-feet Equatorial.

Equal; each $8\frac{1}{2}$ magnitude.

Position = 69° 17′ *sp* or *nf* | 7 Obs. | Diff. = 2° 13′
Distance = 3″.306 | 5 Obs. | Diff. = 0″.432 } Not steady.

Observed on the meridian.

Mean Result.

Position 69° 11′ *np* or *sf* (28 Obs.); Distance 3″.340 (20 Obs.); Epoch 1825.53.

These observations corroborate the motion ascribed to 5 Lyræ. The change of position in 3.11 years amounts to −0° 45′. Calculating on the presumed angular motion −0°.325, it should have been −1° 0′. The difference is nearly insensible.

No. XXXI. R. A. $19^h\ 39^m$; Decl. 44° 42′ N.

δ Cygni; I. 94; H. and S. 304.

Passy; July 26, 1825; Seven-feet Equatorial.

The night being unusually fine, the instrument was placed upon this star when on the meridian: it was examined by Mons^r. GAMBART (Director of the Royal Observatory at Marseilles) and also by myself, with 181, 327, 512 and 787. Both

No. XXXI. R. A. $19^h\ 39^m$; Decl. $44°\ 42'$ N.

δ Cygni; I. 94; H. and S. 304.

continued.

observers agree that it is as round and as sharply defined as possible; neither of us can entertain the slightest suspicion of seeing it elongated in any direction; with 787 it has the appearance of a planetary disc, and is a most beautiful object: it is so extremely steady, that with this high power there is not any difficulty in keeping it bisected by the wire of the micrometer, when placed perpendicular to the diurnal motion.

No. XXXII. R. A. $19^h\ 41^m$; Decl. $11°\ 22'$ N.

π Aquilæ; I. 92; H. and S. 306.

Double; 8th and $8\frac{1}{4}$ magnitudes.

Passy; August 1, 1825; Seven-feet Equatorial.

Position $= 32°\ 58'\ sf$ | 6 Obs. | Diff. $= 4°\ 12'$ } Tolerably steady.
Distance $= 1''.368$ | 5 Obs. | Diff. $= 0''.288$ }

Observed with 413, when on the meridian.

"If the position $32°\ 58'\ sf$ be exact, there must be some monstrous error in that given to the Royal Society in the first memoir, where the position stands $45°\ 27'\ sf$; the only mode to reconcile the differences is, to suppose that in one instance the micrometer has been erroneously read 10 degrees."

Note made in the rough journal at the breakfast table on the morning of August 2, when reducing the observations.

Passy; August 5, 1825; Seven-feet Equatorial.

8th and $8\frac{1}{4}$ magnitudes.

Position $= 32°\ 45'\ sf$; single observation.

Observed when $2\frac{1}{2}$ hours east of the meridian: of course this measure must not be considered as a standard one, but

No. XXXII. R. A. $19^h\ 41^m$; Decl. $11°\ 22'$ N.

π Aquilæ; I. 92; H. and S. 306.

continued.

I think it is very evident the erroneous result will be that given in the published memoir; supposing the wrong 10th degree to have been taken, the mean angle as read off, instead of being $-44°\ 33'$ would be $-54°\ 33' = +35°\ 27'$, a difference from the angle here determined easily enough to be admitted, when the closeness of the stars is considered.

Passy; August 9, 1825; Seven-feet Equatorial.

8th and 8¼ magnitudes.

Position = 32° 35′ *sf* | 6 Obs. | Diff. = 2° 17′. Rather difficult.

Observed with 413 when 20 minutes west of the meridian; stars very unsteady, so much so that measures of distance are impracticable. Set the position wire to $-45°$, and it is so intolerably offensive to the eye that it never can have passed for a measure; the stars stride across the wire. There can be no doubt therefore, that the micrometer was in the observations of September 1823, read off *incorrectly*.

Passy; August 10, 1825; Seven-feet Equatorial.

8th and 8¼ magnitudes.

Position = 34° 22′ *sf* | 6 Obs. | Diff. = 3° 20′
Distance = 1″.527 | 5 Obs. | Diff. = 0″.360 } Extremely difficult.

Observed when on the meridian with 327, the highest power which I can use to night with advantage.

Passy; August 12, 1825; Seven-feet Equatorial.

8th and 8¼ magnitudes.

Position = 33° 4′ *sf* | 6 Obs. | Diff. = 2° 5′. Extremely difficult.

Observed on the meridian with 327, the highest power which the unsteadiness of the stars will allow me advantageously to employ. Observations of distance are impracticable.

No. XXXII. R. A. $19^h\ 41^m$; Decl. 11° 22′ N.

π Aquilæ; I. 92; H. and S. 306.

continued.

Passy; August 17, 1825; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 34° 25′ *sf*	8 Obs.	Diff. = 2° 55′	}	Very satisfactory.
Distance = 1″.515	5 Obs.	Diff. = 0″.192	}	

Observed with 413, when 15 minutes west of the meridian; stars remarkably steady.

Passy; August 21, 1825; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 33° 10′ *sf*	7 Obs.	Diff. = 1° 30′	}	Tolerably steady.
Distance = 1″.786	5 Obs.	Diff. = 0″.481	}	

Observed on the meridian with 413.

Mean Result.

Position 33° 27′ *sf* (40 Obs.); Distance 1″.549 (20 Obs.); Epoch 1825.61.

These observations make it clear that a mistake of 10° (as supposed by Mr. South above) must have been committed in the reading off of the micrometer in 1823. This star must therefore be struck out of the list of Binary stars, as the present measures compared with that of 1783 present only a difference of 0° 57′. This will serve among other instances to show how necessary it is to repeat the measures of double stars on several nights. (H.)

No. XXXIII. R. A. $20^h\ 15^m$; Decl. 77° 10′ N.

$\varkappa$ Cephei; III. 70; H. and S. 321.

Double; 5½ and 10th magnitudes; small, blue.

Passy; August 23, 1825; Seven-feet Equatorial.

Position = 38° 34′ *sf*	7 Obs.	Diff. = 3° 3′	}	Tolerably steady.
Distance = 8″.350	5 Obs.	Diff. = 0″.745	}	

Observed on the meridian.

No. XXXIII. R. A. $20^h\ 15^m$; Decl. 77° 10′ N.

$\varkappa$ Cephei; III. 70; H. and S. 321.

continued.

Passy; August 31, 1825; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = 37° 33′ *sf*	7 Obs.	Diff. = 2° 54′	Unsteady.
Distance = 8″.240	5 Obs.	Diff. = 0″.432	

Stars on the meridian when observed.

Passy; September 5, 1825; Seven-feet Equatorial.

7th and 11th magnitudes.

Position = 33° 56′ *sf*	7 Obs.	Diff. = 1° 50′	Difficult.
Distance = 7″.533	5 Obs.	Diff. = 0″.360	

Small star decidedly blue; night hazy; stars unsteady: observed on the meridian.

Passy; September 6, 1825; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = 35° 7′ *sf*	7 Obs.	Diff. = 4° 26′	Difficult.
Distance = 7″.540	5 Obs.	Diff. = 0″.601	

Night very hazy; stars unsteady; the small one is light blue. Observed on the meridian.

Passy; September 10, 1825; Seven-feet Equatorial.

6th and 10th magnitudes.

Position = 36° 52′ *sf*	7 Obs.	Diff. = 3° 5′	Difficult.
Distance = 7″.692	5 Obs.	Diff. = 0″.721	

Small star pale blue; night hazy; stars unsteady, and on the meridian.

Mean Result.

Position 36° 24′ *sf* (35 Obs.); Distance 7″.871 (25 Obs.);
Epoch 1825.67.

This star has been examined with much perseverance, yet there prevails considerable discordance between the measures at different epochs, and our judgement must be suspended with respect to its motion. (H.)

No. XXXIV. R. A. 20h 59m; Decl. 37° 52′ N.

61 Cygni; IV. 18; H. and S. 329.

Double; 7th and 8th magnitudes.

Passy; September 2, 1825; Seven-feet Equatorial.

Postion = 3° 18′ *nf*	7 Obs.	Diff. = 1° 29′	Very good.
Distance = 15″.491	5 Obs.	Diff. = 0″.481	

Observed on the meridian with 787; stars very steady.

Passy; September 5, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 2° 41′ *nf*	7 Obs.	Diff. = 1° 1′	Unsteady.
Distance = 15″.852	5 Obs.	Diff. = 0″.721	

Observed when on the meridian. Night very hazy.

Passy; September 6, 1825; Seven-feet Equatorial.

8th and 9th, and 9th and 10th magnitudes.

Position = 3° 7′ *nf*	7 Obs.	Diff. = 0° 28′	Rather difficult.
Distance = 15″.201	5 Obs.	Diff. = 0″.456	

Night extremely hazy, particularly during the observations of distance. Stars on the meridian, and tolerably steady.

Passy; September 9, 1825; Seven-feet Equatorial.

7th and 8th, 8th and 9th magnitudes.

Position = 3° 8′ *nf*	7 Obs.	Diff. = 0° 30′	Tolerably steady.
Distance = 15″.691	5 Obs.	Diff. = 0″.769	

Observed when 15 minutes east of the meridian. Night very hazy.

Passy; September 10, 1825; Seven-feet Equatorial.

7th and 8th magnitudes.

Position = 2° 54′ *nf*	7 Obs.	Diff. = 0° 42′	Satisfactory.
Distance = 15″.073	5 Obs.	Diff. = 0″.360	

Observed on the meridian. Night hazy, but the stars are very steady.

Passy; September 20, 1825; Seven-feet Equatorial.

7th and 8th, and 8th and 9th magnitudes.

Position = 3° 22′ *nf*	7 Obs.	Diff. = 2° 33′	Captain Beaufort.
Distance = 15″.689	5 Obs.	Diff. = 0″.408	
Position = 3° 7′ *nf*	7 Obs.	Diff. = 0° 45′	South.
Distance = 15″.099	5 Obs.	Diff. = 0″.192	

Night very hazy. Stars unsteady, and not well defined.

No. XXXIV. R. A. 20h 59m; Decl. 37° 52′ N.

61 Cygni; IV. 18; H. and S. 329.

continued.

Passy; September 24, 1825; Seven-feet Equatorial.

6th and 7th magnitudes.

Position = 2° 50′ *nf*	7 Obs.	Diff. = 0° 46′	SOUTH.
Distance = 15″.689	5 Obs.	Diff. = 0″.697	
Position = 3° 13′ *nf*	7 Obs.	Diff. = 2° 8′	Captain BEAUFORT.
Distance = 15″.208	5 Obs.	Diff. = 1″.034	

Stars well defined and very steady.

Mean Result.

Position 3° 4′ *nf* (63 Obs.); Distance 15″.444 (45 Obs.); Epoch 1825.70.

The result here given affords an extremely satisfactory verification of our former measures, and of the mean motion + 0°.730 assigned to this star. The interval of the epochs is 2.8 years, in which + 2° 3′ ought by computation to have been described, while by observation + 2° 15′ have been described. The distances too differ only by 0″.019, a quantity perfectly insensible. (H.)

No. XXXV. R. A. 22h 8m; Decl. 36° 51′ N.

1 Lacertæ? H. and S. 341.

Double; 8th and 10th magnitudes; small, blue.

Passy; September 29, 1824; Seven-feet Equatorial.

Position = 78° 33′ *sp*	5 Obs.	Diff. = 1° 59′	Very difficult.
Distance = 15″.434	5 Obs.	Diff. = 0″.481	

Near this star, about 22h 4′ ± Right Ascension, and 36° 52′ ± North Declination, will be found a minute double star of the 1st or 2nd class; but it is not measurable with this instrument, although the night is particularly favourable.

Passy; November 21, 1824; Seven-feet Equatorial.

7th and 10th magnitudes.

Position = 75° 4′ *sp*	5 Obs.	Diff. = 0° 58′	Extremely difficult.
Distance = 15″.809	5 Obs.	Diff. = 0″.986	

The small star is very obscure.

No. XXXV. R. A. $22^h\ 8^m$; Decl. 36° 51′ N.

1 Lacertæ? H. and S. 341.

continued.

Passy; November 24, 1824; Seven-feet Equatorial.

9th and 12th magnitudes.

Position = 77° 55′ *sp*	5 Obs.	Diff. = 1° 24′	Extremely difficult.
Distance = 15″.864	5 Obs.	Diff. = 0″.841	

Night unfavourable.

Mean Result.

Position 77° 11′ *sp* (15 Obs.); Distance 15″.732 (15 Obs.); Epoch 1824.84.

When this star was observed, I was not aware that observations of it had been already communicated to the Royal Society which give, Position 78° 43′ *sp*; Distance 15″.619; Epoch 1823.72.

No. XXXVI. R. A. $22^h\ 20^m$; Decl. 0° 57′ S.

ζ Aquarii; II. 7; H. and S. 346.

Double; 7th and 7½ magnitudes.

Passy; September 4, 1825; Seven-feet Equatorial.

Position = 88° 17′ *sp* | 7 Obs. | Diff. = 0° 34′. Unsteady.

The night is become so bad, that observations of distance cannot be procured.

Passy; September 15, 1825; Seven-feet Equatorial.

7th and 7½ magnitudes.

Position = 88° 32′ *sp*	7 Obs.	Diff. = 0° 53′	Tolerably steady.
Distance = 4″.039	5 Obs.	Diff. = 0″.793	

Observed on the meridian with 787.

Passy; September 24, 1825; Seven-feet Equatorial.

7th and 7½ magnitudes.

Position = 89° 33′ *nf*	7 Obs.	Diff. = 0° 54′	South.
Distance = 4″.157	5 Obs.	Diff. = 0″.168	
Position = 88° 42′ *nf*	7 Obs.	Diff. = 2° 58′	Captain Beaufort.
Distance = 3″.993	5 Obs.	Diff. = 0″.481	

Observed with 181; stars very steady.

No. XXXVI. R. A. $22^h\ 20^m$; Decl. $0°\ 57'$ S.

ζ Aquarii; II. 7; H. and S. 346.

continued.

Distance = 4″.032	5 Obs.	Diff. = 0″.432	With 787	SOUTH.
Distance = 3″.835	5 Obs.	Diff. = 0″.336		Captain BEAUFORT.

Measures of distance gotten without any difficulty; both stars sharply defined, and as round as possible with 787.

Passy; October 8, 1825; Seven-feet Equatorial.

7th and 7½ magnitudes.

Position = 87° 52′ *nf*	7 Obs.	Diff. = 1° 31′	SOUTH.
Distance = 4″.366	5 Obs.	Diff. = 0″.264	
Position = 90° 7′ *nf*	7 Obs.	Diff. = 1° 16′.	Captain BEAUFORT.

Night become so hazy that the stars are no longer visible; when seen they were unsteady and ill defined.

Passy; October 9, 1825; Seven-feet Equatorial.

8th and 9th magnitudes.

Position = 88° 28′ *nf*	7 Obs.	Diff. = 0° 56′	SOUTH.
Distance = 3″.809	5 Obs.	Diff. = 0″.360	
Position = 89° 56′ *nf*	7 Obs.	Diff. = 1° 2′	Captain BEAUFORT.
Distance = 3″.818	5 Obs.	Diff. = 0″.841	

Night very hazy; stars unsteady.

Position = 89° 15′ *nf*	14 Obs.	Diff. = 6° 29′	Mons^r. GAMBEY.
Distance = 4″.097	10 Obs.	Diff. = 0″.937	

Mean Result.

Position 88° 56′ *nf* (70 Obs.); Distance 4″.014 (45 Obs.); Epoch 1825.73.

These measures verify the direction of the motion ascribed to this star, the present angle differing from that of 1822.27 by — 0° 33′. By calculation it ought to be — 1° 33′. The discrepancy between these and the former measures of distance is extraordinary. (H.)

JAMES SOUTH.

Passy; Rue Franklin, No. 19, Opposite the Champ de Mars and the Ecole Militaire.

Latitude 48° 51′ 31″ N.
Longitude 13″.36 (of time) west of the Royal Observatory of Paris.

RE-EXAMINATION OF SEVEN DOUBLE STARS, MADE WHILST THE FORMER PART OF THIS COMMUNICATION WAS IN THE PRESS.

No. I. R. A. $4^h\ 18^m$; Decl. $53°\ 31'$ N.

1 Camelopardali; H. and S. 43.

Double; 8th and 9th magnitudes; small, bluish.

Sloane-street; February 8, 1826; Seven-feet Equatorial.

Position = 36° 59′ *n p*	8 Obs.	Diff. = 3° 40′	Very hazy.
Distance = 10″.212	5 Obs.	Diff. = 0″.769	

Observed when 1½ hours west of the meridian; stars ill defined, and very unsteady.

Sloane-street; February 11, 1826; Seven-feet Equatorial.

8th and 10th magnitudes.

Position = 37° 31′ *n p*	8 Obs.	Diff. = 1° 43′	Hazy.
Distance = 10″.593	5 Obs.	Diff. = 0″.841	

Stars extremely unsteady, and at times very indistinct; observed when one hour west of the meridian.

Sloane-street; February 12, 1826; Seven-feet Equatorial.

7th and 8th magnitudes.

Position = 37° 0′ *n p*	8 Obs.	Diff. = 1° 22′	Tolerably steady.
Distance = 10″.055	5 Obs.	Diff. = 0″.913	

Observed on the meridian; night favourable.

Mean Result.

Position 37° 10′ *n p* (24 Obs.); Distance 10″.287 (15 Obs.); Epoch 1826.10.

Observations made in Blackman-street gave, Position 36° 26′ *n p*; Distance 10″.450; Epoch 1822.05: hence this star is liable to no material change either of position or distance.

No. II. R. A. $4^h\ 21^m$; Decl. 42° 39′ N.

57 *m* Persei; H. and S. 44.

Double; 8th and 8½ magnitudes.

Sloane-street; February 6, 1826; Seven-feet Equatorial.

Position = 70° 23′ *sp*	7 Obs.	Diff. = 0° 43′	}	Cloudy.
Distance = 1′ 50″.269	7 Obs.	Diff. = 1″.418	}	

Stars only visible by glimpses, and when seen very unsteady.

Sloane-street; February 7, 1826; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 70° 23′ *sp*	7 Obs.	Diff. = 0° 32′	}	Ill defined and unsteady.
Distance = 1′ 51″.192	7 Obs.	Diff. = 0″.769	}	

Observed when 40 minutes west of the meridian.

Sloane-street; February 12, 1826; Seven-feet Equatorial.

8th and 8½ magnitudes.

Position = 70° 41′ *sp*	7 Obs.	Diff. = 0° 43′	}	Satisfactory.
Distance = 1′ 50″.638	7 Obs.	Diff. = 1″.515	}	

Observed when 70 minutes west of the meridian; stars tolerably steady and well defined.

Mean Result.

Position 70° 29′ *sp* (21 Obs.); Distance 1′ 50′.700 (21 Obs.); Epoch 1826.10.

Our former measures were, Position 71° 8′ *sp*; Distance 1′ 50″.193; Epoch 1821.91; agreeing sufficiently with the present determinations to render it probable that the star is liable to no very important change: it is true, the distance here given differs 5-tenths of a second from that arrived at by our joint observations, and that it lies in the right direction; still future observations must decide whether the discordance between Sir W. HERSCHEL's measure of distance and our own, = 13″.77′, have any other foundation than instrumental error of the micrometer employed in 1783.

No. III. R. A. $6^h\ 14^m$; Decl. 4° 41′ N.

8 Monocerotis; H. and S. 69.

Double; 7th and 8th magnitudes.

Sloane-street; February 7, 1826; Seven-feet Equatorial.

Position = 63° 38′ *nf* | 5 Obs. | Diff. = 0° 24′ } Unsteady.
Distance = 14″.332 | 5 Obs. | Diff. = 1″.635 }

Observed when 40 minutes east of the meridian; night unfavourable.

Sloane-street; February 8, 1826; Seven-feet Equatorial.

6th and 8th magnitudes.

Position = 64° 3′ *nf* | 5 Obs. | Diff. = 1° 22′ } Unsteady.
Distance = 13″.890 | 5 Obs. | Diff. = 0″.264 }

Stars 10 minutes west of the meridian when observed; night hazy.

Sloane-street; February 12, 1826; Seven-feet Equatorial.

7th and 8½ magnitudes.

Position = 65° 52′ *nf* | 7 Obs. | Diff. = 2° 47′ } Very unsteady.
Distance = 14″.013 | 5 Obs. | Diff. = 0″.360 }

Observed when on the meridian; stars tolerably well defined.

Sloane-street; February 25, 1826; Seven-feet Equatorial.

6th and 9th magnitudes.

Position = 65° 2′ *nf* | 7 Obs. | Diff. = 0° 45′ } Unsteady.
Distance = 14″.352 | 5 Obs. | Diff. = 0″.601 }

Observed on the meridian.

Mean Result.

Position 64° 47′ *nf* (24 Obs.); Distance 14″.147 (20 Obs.); Epoch 1826.13.

Observations with the Five-feet Equatorial assigned to this double star, Position 64° 39′ *nf*; Distance 14″.379; Epoch 1823.04, rendering it probable that no important change of position or distance need be expected in this double star.

No. IV. R. A. $6^h\ 22^m$; Decl. 17° 54′ N.

20 Geminorum; H. and S. 72.

Double; 8th and $8\frac{1}{2}$ magnitudes.

Sloane-street; February 7, 1826; Seven-feet Equatorial.

Position = 60° 33′ *sp* | 5 Obs. | Diff. = 0° 47′ } Unsteady.
Distance = 20″.892 | 5 Obs. | Diff. = 0″.601 }

Observed when half an hour east of the meridian; stars neither steady, nor well defined.

Sloane-street; February 8, 1826; Seven-feet Equatorial.

$6\frac{1}{2}$ and 7th magnitudes.

Position = 59° 56′ *sp* | 5 Obs. | Diff. = 0° 40′ } Hazy.
Distance = 19″.886 | 5 Obs. | Diff. = 0″.673 }

Observed when 18 minutes west of the meridian; stars very unsteady.

Sloane-street; February 11, 1826; Seven-feet Equatorial.

8th and $8\frac{1}{2}$ magnitudes.

Position = 61° 17′ *sp* | 5 Obs. | Diff. = 3° 15′. Extremely unsteady.

The night is become so unfavourable, that I cannot procure any measures of distance.

Sloane-street; February 12, 1826; Seven-feet Equatorial.

8th and $8\frac{1}{2}$ magnitudes.

Position = 60° 48′ *sp* | 5 Obs. | Diff. = 0° 54′ } Unsteady.
Distance = 19″.976 | 5 Obs. | Diff. = 1″.515 }

Observed when 10 minutes west of the meridian; stars tolerably well defined.

Mean Result.

Position 60° 38′ *sp* (20 Obs.); Distance 20″.251 (15 Obs.); Epoch 1826.09.

Our former measures of this star gave, Position 61° 3′ *sp*; Distance 19″.454; Epoch 1822.04; the former according sufficiently with the present determination; the latter differing more than might be expected, *viz.* nearly 8-tenths of a second: whether this arise from a real motion of one of the stars, or from erroneous observation, remains to be ascertained.

No. V. R. A. $7^h\ 9^m$; Decl. 50° 27′ N.

20 Lyncis; H. and S. 79.

Double; 8th and $8\frac{1}{4}$ magnitudes.

Sloane-street; February 7, 1826; Seven-feet Equatorial.

Position = 16° 37′ *sp*	5 Obs.	Diff. = 0° 47′	Hazy.
Distance = 14″.722	5 Obs.	Diff. = 1″.202	

The stars on the meridian at the time of observation; they are pale, ill defined, and unsteady.

Sloane-street; Febrnary 8, 1826; Seven-feet Equatorial.

8th and $8\frac{1}{4}$ magnitudes.

Position = 16° 18′ *sp*	5 Obs.	Diff. = 0° 56′	Hazy.
Distance = 14″.943	5 Obs.	Diff. = 0″.432	

Observed on the meridian; stars ill defined and unsteady.

Sloane-street; February 12, 1826; Seven-feet Equatorial.

Equal; each $8\frac{1}{4}$ magnitude.

Position = 17° 32′ *sp* or *nf*	8 Obs.	Diff. = 1° 56′	Unsteady.
Distance = 15″.532	5 Obs.	Diff. = 0″.384	

Stars tolerably well defined, and 15 minutes west of the meridian when observed.

Mean Result.

Position 16° 56′ *sp* (18 Obs.); Distance 15″.066 (15 Obs.); Epoch 1826.10.

By observations made in Blackman-street the position of this double star was 17° 21′ *sp*; Distance 15″.966 (erroneously printed 16″.988); Epoch 1823.33; the former differing very little, but the latter more than might be expected from the present determinations; what is the cause of the discrepancy future observations must decide.

No. VI. R. A. $7^h\ 31^m$; Decl. $5°\ 43'$ N.

31 (BODE) Canis Minoris; H. and S. 82.

Double; equal; each of the 9th magnitude.

Sloane-street; February 12, 1826; Seven-feet Equatorial.

Position $= 42°\ 25'\ sf$ or np | 7 Obs. | Diff. $= 5°\ 28'$ } Extremely difficult.
Distance $= 1''.462$ | 5 Obs. | Diff. $= 0''.096$ }

Observed with 413, when on the meridian; stars very unsteady, but at times well defined.

Sloane-street; March 15, 1826; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position $= 39°\ 32'\ sf$ | 7 Obs. | Diff. $= 2°\ 42'$ } Difficult.
Distance $= 1''.637$ | 5 Obs. | Diff. $= 0''.288$ }

Twenty minutes west of the meridian, when observed with 327; stars tolerably steady, but faint; the measures I consider good.

Sloane-street; March 17, 1826; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position $= 39°\ 59'\ sf$ | 14 Obs. | Diff. $= 3°\ 3'$ } Difficult.
Distance $= 1''.260$ | 10 Obs. | Diff. $= 0''.192$ }

Observed with 327, when 40 minutes west of the meridian; stars tolerably steady, and extremely well defined; observations deemed satisfactory.

Sloane-street; March 18, 1826; Seven-feet Equatorial.

9th and 9½ magnitudes.

Position $= 42°\ 0'\ sf$ | 4 Obs. | Diff. $= 1°\ 30'$. Difficult.

The night is become so cloudy, no more observations can be procured.

Mean Result.

Position $40°\ 40'\ sf$ (32 Obs.); Distance $1''.405$ (20 Obs.); Epoch 1826.18.

Our former observations gave $37°\ 8'\ sf$ for the position of this double star, Epoch 1823.13; offering a difference of more than $3\frac{1}{2}$ degrees with the present determination; but the observations are attended with so much difficulty, that no positive conclusion can be formed relative to the rest or motion of this star: the first memoir contained no observations of distance.

No. VII. R. A. $9^h\ 19^m$; Decl. 9° 50′ N.

ω^3 Leonis; I. 26; S. 600.

Double; 6th and 9th magnitudes; small, pale blue.

Sloane-street; February 12, 1826; Seven-feet Equatorial.

Position = 64° 14′ *sf* | 6 Obs. | Diff. = 4° 42′. Excessively difficult.

The small star only visible by glimpses; observations made on the meridian, with 787; the extreme unsteadiness of the stars renders it impossible to procure any measures of distance, and those of position must be received with caution.

The unfavourableness of the weather has not allowed me to procure other measures of this difficult star. Sloane-street, March 18, 1826.

The position April 4, 1783, was measured with a 20-feet reflector, 12 inches aperture, and found to be 20° 54′ *sf*. The change is very great, no less than 43° 20′ in 42.8 years, or almost precisely a degree per annum. There can be little doubt, therefore, that this very curious double star is entitled to a place among the revolving stars or Binary systems. The uncertainty of the present observations, arising from the difficulty of the star, and the unfavourable weather, might render us cautious in admitting this conclusion; but a series of well-agreeing measures by Mr. STRUVE, on four nights, from Feb. 25, to April 4, 1825, which give a mean result 63°.7 *sf* sufficiently establish the fact. These interesting observations are contained in a letter from Mr. STRUVE, dated April 21, 1825. (H.)

JAMES SOUTH.

132 Sloane-street, April 7th, 1826.

A Synoptical View *of the Results afforded by the Observations detailed in the present, and preceding communications.*

Vol. for	Part.	Page.	Star's Name, &c.	Observer and Number.	R. A.	Decl.	Position.	Quadrant.	Distance.	Remarks.
					h. m.	° ′	° ′		′ ″	
1826	1	6	51 Bode Androm...	S....381	0 0	45 23 N	4 39	*nf*	.... 5.009	Unchanged.
1824	3	398	27 Bode Ceti	H&S 361	0 2	4 4S	18 45	*np*	.... 9.000	Distance estimated.
1826	1	7	1789; 214.....	S....382	0 5	61 49 N	85 50	*sf*	... 18.187	
1824	3	24	35 Piscium	H&S..1	0 6	7 49 N	60 46	*sf*	... 11.168	Unchanged.
1824	3	25	38 Piscium	H&S..2	0 8	7 51 N	32 9	*sp*	.... 4.967	Unchanged.
1826	1	7	Nova	S....383	0 9	15 32 N	39. 44	*sp*	... 12.100	
1826	1	8	V. 85.....	S....384	0 10	37 20 N	76 48	*nf*	... 45.744	Increase of Dist. = 15″ nearly.
1826	1	9	Nova	S....385	0 16	31 31 N	81 25	*sf*	.... 5.636	
1824	3	26	51 Piscium	H&S..3	0 23	5 57 N	7 11	*nf*	... 25.866	Changed in Position.
1826	1	9	Nova	S....386	0 23	27 32 N	74 34	*sp, nf*	... 42.281	
1826	1	10	H. C. 478	S....387	0 26	17 55 N	38 1	*sp, nf*	... 42.510	
1824	3	27	π Androm.	H&S..4	0 27	32 43 N	85 26	*sf*	... 35.951	Unchanged.
1826	1	10	H. C. 307.....	S....388	0 27	29 1N	56 18	*nf*	.... 6.554	
1824	3	28	α Cassiop.....	H&S..5	0 30	55 33 N	7 52	*np*	.....	Unchanged in Angle; Dist. *perhaps* incr.
1824	3	29	142 Bode Androm..	H&S..6	0 37	29 58N	34 0	*np*	... 46.464	Unchanged: pale, ill defined stars.
1824	3	30	V. 82.....	H&S..7	0 37	50 7 N	11 29	*nf*	... 47.136	Change 3° 41′ in Pos. and — 3″.706 in Dist.
1824	3	30	η Cassiop.	H&S..8	0 38	56 51 N	7 56	*nf*	.... 8.789	Binary. + 0°.5133 = mean ann. mot.
1826	1	313	.....	S. Re-exam.	....	.....	6 55	*nf*	.... 9.904	Epoch 1825.78.
1826	1	11	78 Bode Cassiop....	S....389	0 38	50 27 N	57 35	*sf*	.... 2.569	A slow change probably in Angle.
1824	3	32	65 Piscium	H&S..9	0 40	26 43 N	25 48	*np, sf*	.... 5.960	Binary? — 0°.117 per annum.
1824	3	33	Nova	H&S.10	0 42	67 51 N	55 12	*sp*	.... 3.151	
1826	1	12	H. C. 249.....	S....390	0 49	16 38 S	57 7	*sp*	.... 7.781	
1824	3	34	164 Bode Androm..	H&S.11	0 50	43 44 N	78 57	*sp*	.... 7.520	
1826	1	12	P. O. 251.....	S....391	0 50	0 11 S	26 27	*np*	... 18.866	
1824	3	34	26 Ceti	H&S.12	0 54	0 24N	14 39	*sp*	... 15.756	Unchanged.
1824	3	35	77 Piscium	H&S.13	0 56	3 57 N	7 20	*nf*	... 32.069	Unchanged.
1824	3	36	74 ψ Piscium	H&S.14	0 56	20 30N	71 2	*sf*	... 30.340	Position unchanged.
1826	1	13	III. 73.....	S....392	0 56	6 25 S	82 42	*sf*	... 12.893	Pos. changed 8° 6′; Dist. diminished 2″.
1826	1	14	σ^3 Piscium.....	S....393	0 56	31 13 N	21 8	*np*	... 90 ±	Change of 6° in Pos.; but identity of the star questionable.
1824	3	37	Polaris	H&S.15	0 58	88 22 N	61 11	*sp*	... 18.701	Unchanged.
1826	1	15	160 Bode Ceti	S....394	0 58	2 41 S	57 19	*np*	.... 4.144	
1826	1	15	IV. 120.....	S....395	1 3	31 7 N	21 43	*sp*	... 19.373	Unchanged.
1824	3	41	ζ Piscium.....	H&S.16	1 4	6 37 N	26 33	*nf*	... 24.648	Unchanged.
1824	3	42	37 Ceti.....	H&S.17	1 5	8 45 S	62 27	*np*	... 50.780	Pos. unchanged; Dist. much increased.
1826	1	16	IV. 77.....	S....396	1 5	8 33 S	67 34	*np*	... 19.891	Pos. changed 4°; Dist. unchanged.
1826	1	16	119 Bode Cassiop...	S....397	1 9	63 43 N	82 53	*np*	... 50.357	
1824	3	42	ψ Cassiop.....	H&S.18	1 13	67 11 N	11 19	*sf*	... 33.347	Unchanged.
1826	1	17	Nova	S....398	1 19	7 3N	8 17	*sf*	. 1 9.752	
1824	3	43	100 Piscium	H&S.19	1 25	11 38N	9 35	*nf*	... 16.018	Unchanged.
1826	1	17	χ' Ceti.....	S....399	1 33	12 12 S	0 4	*nf*	.... 4.193	
1826	1	18	H. C. 247.....	S....400	1 34	7 59S	75 2	*sp*	... 36.645	

Vol. for	Part.	Page.	Star's Name, &c.	Observer and Number.	R. A.	Decl.	Position.	Quadrant.	Distance.	Remarks.
					h. m.	° ′	° ′		′ ″	
1826	1	18	304 Bode Piscium ..	S....401	1 40	21 23 N	82 26	*sf*	.... 3.378	Pos. changed 5°; Dist. unchanged.
1826	1	19	241 Bode Androm. .	S....402	1 42	36 26 N	71 42	*sf*	.... 4.258	Probably unchanged.
1824	3	44	γ Arietis 1 and 2....	H & S.20	1 44	18 25 N	88 41	*np, sf*	.... 9.109	Unchanged.
1824	3	45	..... 1 and 3....	H & S.21	....	.....	4 46	*nf*	. 3 48.764	
1826	1	20	Nova	S....403	1 45	27 56 N	75 52	*sf*	.... 5.673	
1824	3	46	47 Cassiop.	H & S.22	1 47	76 25 N	77 41	*sp*	. 1 33.594	
1826	1	20	IV. 104	S....404	1 47	40 30 N	22 35	*nf*	... 20.590	Unchanged.
1824	3	46	λ Arietis	H & S.23	1 48	22 43 N	44 19	*nf*	... 37.889	Unchanged.
1824	3	47	292 Bode Ceti	H & S.24	1 51	23 48 S	36 30	*np*	.... 9.080	Much changed *if* the same star.
1824	3	47	ω Piscium	H & S.25	1 53	1 53 N	65 33	*np*	.... 5.428	Unchanged.
1824	3	49	γ Androm	H & S.26	1 53	41 28 N	25 14	*nf*	... 10.909	Unchanged.
1826	1	21	1789; 223.....	S....405	1 53	78 50 N	4 12	*np*	... 55.303	
1826	1	22	14 Arietis	S....406	1 59	25 5 N	7 58	*np*	. 1 45.258	Pos. changed 3°.
1824	3	50	59 Androm.....	H & S.27	2 0	38 11 N	56 5	*nf*	... 17.157	Pos. unchanged.
1826	1	23	H. C. 392 A and B..	S....407	2 0	1 18 S	19 31	*sp*	.... 4.956	
1826	1	23	..... A and C..	.....	....	.....	12 48	*np, sf*	. 4 4.079	
1826	1	24	III. 68	S....408	2 0	19 28 N	58 49	*sf*	.... 8.952	Pos. perhaps changed 3°. Dist. unaltered.
1824	3	52	ι Trianguli	H & S.28	2 2	29 27 N	12 2	*nf*	.... 3.881	Pos. changed 7° 39′.
1824	3	53	66 Ceti.....	H & S.29	2 3	3 17 S	43 55	*sp*	... 16.173	Distance unchanged.
1824	3	54	H. C. 124	H & S.30	2 4	29 34 N	22 50	*sp, nf*	.... 6.067	
1826	1	24	χ Persei.....	S....409	2 5	56 41 N	46 30	*sf*	. 2 4.533	No measures given by Sir W. Herschel.
1826	1	25	H. C. 140	S....410	2 7	39 27 N	20 56	*np*	... 11.100	
1824	3	54	10 *a*? Trianguli....	H & S.31	2 8	27 49 N	61 4	*sp*	... 14.347	
1824	3	399	ο Ceti.....	H&S 362	2 10	3 48 S	1 25	*nf*	.....	Changed in Pos.
1826	1	25	ι Cassiop. A and C..	S....411	2 14	66 35 N	16 52	*sf*	.... 7.909	As III. 4, doubtful if changed: of it as close double, I have no satisfactory mea-
1826	1	25	..... A and B..	.....	....	.....	....	....	.....	*Remarkably* unchanged. [sures.
1826	1	27	378 Bode Ceti	S....412	2 17	16 8 S	22 24	*np*	... 11.704	
1826	1	28	H. C. 48	S....413	2 22	0 19 N	53 23	*sp*	... 14.332	
1826	1	28	Nova	S....414	2 22	17 37 N	89 11	*nf*	.... 8.446	
1824	3	55	30 Arietis	H & S.32	2 26	23 52 N	2 26	*np*	... 38.445	Dist. increased.
1824	3	56	33 Arietis	H & S.33	2 30	26 17 N	88 20	*nf*	... 29.185	Pos. unchanged.
1826	1	29	Nova; A and B	S....415	2 31	18 5 N	28 48	*sf*	.... 2.875	
1826	1	29	.....A and C.....	.....	....	.....	31 29	*sp*	. 1 6.256	
1826	1	29	IV. 64; A and B...	S....416	2 31	39 31 N	60 30	*sp*	... 22.883	No sensible change of Pos. or Dist. in
1826	1	29	..... A and C...	.....	....	.....	53 53	*sp*	. 4 26.042	A B.
1826	1	30	H. C. 371	S....417	2 32	55 45 N	5 50	*np*	... 16.538	
1826	1	31	Nova	S....418	2 34	28 41 N	24 17	*np*	.... 2.903	
1824	3	57	ν Persei 1 and 2	H & S.34	2 38	55 8 N	29 53	*np*	... 28.959	Pos. variable + 0°.25 per annum.
1824	3	57	..... 1 and 3	.....	....	.....	24 48	*np*	. 3 57.175	
1824	3	59	ψ Arietis	H & S.35	2 39	16 42 N	32 29	*sf*	.... 3.076	
1824	3	61	41 Arietis	H & S.36	2 39	26 31 N	43 24	*sp*	. 2 7.557	Unchanged in Distance.
1826	1	32	85 Bode Persei.....	S....419	2 40	52 15 N	21 1	*np*	.... 1.321	Unchanged since 1804.
1826	1	33	20 Persei	S....420	2 42	37 36 N	33 50	*sp*	... 13.886	Probably unchanged.
1826	1	33	H. C. 121.....	S....421	2 46	43 47 N	26 46	*np*	... 28.411	
1826	1	34	P. II. 220	S....422	2 48	51 38 N	4 40	*nf*	... 12.960	
1826	1	34	41 Bode Ap. Chem.	S....423	2 49	25 42 S	50 52	*sp*	... 27.754	
1824	3	61	499 Bode Ceti	H & S.37	2 59	6 46 N	73 25	*sf*	. 1 21.283	
1826	1	35	II. 76.....	S....424	3 10	19 8 N	18 56	*sp*	.... 7.501	Pos. slightly changed; Dist. increased 1″.7.
1826	1	36	Nova	S....425	3 12	29 11 N	12 18	*sf, np*	... 10.345	
1826	1	36	III. 77.....	S....426	3 18	19 52 N	73 7	*sf*	.... 7.798	Unchanged.
1826	1	37	Struve, 94.....	S....427	3 21	27 6 N	37 7	*sp*	... 43.575	
1826	1	38	Struve, 93	S....428	3 21	26 57 N	0 24	*np*	... 11.674	
1826	1	38	H. C. 31	S....429	3 23	22 45 N	55 26	*nf, sp*	. 1 11.640	
1824	3	401	7 Tauri	H&S 363	3 24	23 51 N	33 54	*nf*	... 21.055	Distance only estimated.
1826	1	39	H. C. 121	S....430	3 26	44 12 N	4 39	*sf*	... 41.511	
1826	1	39	III. 45	S....431	3 28	0 3 N	44 42	*sp*	.... 5.812	Probably unchanged.

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1826	1	40	II. 52	S....432	3 29	33 32 N	13 44	*sf, np*	... 3.450	Doubtful if changed or not.
1826	1	41	Nova; or 145.23	S....433	3 30	28 11 N	65 3	*sp*	... 7.326	
1826	1	41	H. C. 122	S....434	3 32	37 48 N	1 33	*nf*	.. 28.428	
1826	1	42	H. C. 137	S....435	3 35	40 55 N	44 18	*nf*	... 9.867	
1826	1	42	H. C. 371	S....436	3 35	56 31 N	16 2	*nf*	.. 57.706	
1826	1	43	STRUVE, 105	S....437	3 36	23 27 N	29 43	*sf*	.. 34.566	
1826	1	43	Alcyone A and B	S....438	3 37	23 32 N	18 42	*np*	1 56.607	
1826	1	43	..... B and C	.....	....	.....	74 8	*np*	1 25.640	
1826	1	44	..... B and D	.....	....	.....	33 54	*np*	1 14.686	
1826	1	45	30 Tauri	S....439	3 38	10 35 N	31 14	*nf*	... 9.867	Sir W. H's observations very dubious.
1826	1	46	43 Persei	S....440	3 43	50 10 N	59 39	*nf*	1 16.934	
1826	1	47	ζ Persei A and B	S....441	3 43	31 20 N	65 2	*sp*	.. 13.296	
1826	1	48	.....A and C	.....	....	.....	71 14	*sp*	1 24.379	A C changed in Pos. by proper motion.
1826	1	48	.....A and D	.....	....	.....	85 27	*sp*	1 59.071	
1824	3	62	32 Eridani	H & S. 38	3 45	3 30 S	79 1	*np*	... 8.081	Sensibly changed.
1824	3	63	ι Persei 1 and 2	H & S. 39	3 46	39 29 S	79 38	*nf*	... 8.587	Pos. unchanged; Dist. increased sensibly.
1824	3	63	.....1 and 3	.....	....	.....	54 0	*sf*	.....	
1826	1	49	P. III. 213	S....442	3 50	22 41 N	37 41	*sf*	... 7.208	
1826	1	50	Nova A and B	S....443	3 57	13 54 N	23 53	*sf*	.. 44.212	
1826	1	50	.....A and C	.....	....	.....	31 11	*np*	3 1.909	
1826	1	51	Nova	S....444	3 58	22 38 N	84 8	*sp*	... 6.301	
1824	3	401	μ Persei	H&S 364	4 2	47 57 N	38 18	*sp*	1 31.559	
1826	1	52	STRUVE, 117; A and B	S....445	4 7	49 50 N	56 33	*np*	1 15.220	
1826	1	52	..... A and C	.....	....	.....	10 7	*sp*	2 28.720	
1826	1	53	40 Eridani	S....446	4 7	7 55 S	17 58	*sf*	1 24.726	
1824	3	64	φ Tauri	H & S. 40	4 9	26 54 N	29 33	*sp*	.. 56.841	Unchanged.
1824	3	65	χ Tauri	H & S. 41	4 12	25 11 N	66 4	*nf*	.. 19.962	Unchanged.
1824	3	66	62 Tauri	H & S. 42	4 13	23 52 N	19 37	*np*	.. 29.052	Unchanged.
1826	1	54	IV. 72	S....447	4 13	33 53 N	29 49	*nf*	.. 19.865	Pos. unchanged; Dist. increased 3″.
1824	3	67	1 Camelop	H & S. 43	4 18	53 31 N	36 26	*np*	.. 10.450	
1826	1	385	.....	S. Re-exam.	....	.....	37 10	*np*	.. 10.287	Epoch 1826.10.
1826	1	54	H. C. 136	S....448	4 18	29 57 N	55 43	*nf*	.. 15.254	
1826	1	55	IV. 75	S....449	4 18	9 41 N	67 30	*sf*	.. 22.900±	Pos. changed 5° 34′; Dist. unchanged.
1826	1	56	145.24; or Nova	S....450	4 19	39 35 N	25 2	*sf*	... 9.578	
1824	3	67	57 *m.* Persei	H & S. 44	4 21	42 39 N	71 8	*sp*	1 50.193	Distance increased + 13″.7.
1826	1	386	.....	S. Re-exam.	....	.....	70 29	*sp*	1 50.700	Epoch 1826.10.
1826	1	56	Nova	S....451	4 23	47 3 N	74 18	*sp*	1 0.454	
1824	3	402	III. 65	H&S 365	4 24	40 43 N	59 0	*nf*	.. 12.468	
1824	3	68	88 *d.* Tauri	H & S. 45	4 26	9 47 N	28 59	*np*	1 9.455	Distance unchanged.
1826	1	57	Aldebaran	S....452	4 26	16 8 N	53 49	*nf*	1 30.000±	Unchanged.
1826	1	58	III. 100	S....453	4 27	10 5 S	11 22	*sp*	.. 13.634	Pos. changed 5°; Dist. increased 1″.7.
1826	1	58	H. C. 204	S....454	4 28	26 35 N	60 53	*sp, nf*	... 3.919	
1826	1	59	τ Tauri	S....455	4 31	22 36 N	58 28	*sp*	1 2.817	Distance unchanged.
1826	1	59	II. 81 A and B	S....456	4 32	0 35 N	56 24	*np*	... 6.455	
1826	1	59	..... A and C	.....	....	.....	6 0	*sp*	1 44.412	
1824	3	69	55 Eridani	H & S. 46	4 35	9 9 S	48 20	*np, sf*	.. 10.510	Unchanged?
1826	1	60	H. C. 251	S....457	4 44	1 34 S	83 41	*np*	.. 41.490	
1826	1	61	H. C. 42	S....458	4 44	7 6 N	73 8	*sp*	.. 16.933	
1824	3	70	ω Aurigæ	H & S. 47	4 47	37 36 N	82 1	*np*	... 7.892	Unchanged.
1826	1	61	10 Camelop	S....459	4 47	60 11 N	62 18	*sp*	1 19.859	No measures given by Sir W. HERSCHEL.
1824	3	71	62 Eridani	H & S. 48	4 48	5 28 S	15 16	*nf*	1 5.865	Pos. unchanged.
1826	1	62	I. 68	S....460	4 49	1 23 N	83 49	*sf, np*	... 2.565	Pos. changed 11°: probably a Binary system. Ann, mot. = −0°.269.
1826	1	63	STRUVE, 146	S....461	4 50	26 25 N	68 36	*sf*	1 18.561	
1826	1	63	H. C. 465	S....462	4 51	3 22 N	10 26	*sp*	.. 21.808	
1826	1	64	STRUVE, 149	S....463	4 52	11 7 N	60 25	*nf*	.. 33.604	

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					h. m.	° ′	° ′		′ ″	
1826	1	64	62 Bode Camel.	S....464	4 53	79 0N	76 23	*np*	... 37.012	
1826	1	65	P. IV. 278.....	S....465	4 53	1 20N	41 42	*nf*	... 14.435	
1826	1	65	105 Tauri.....	S....466	4 57	21 27N	19 3	*sp*	.1 49.990	Probably unchanged.
1826	1	66	Nova.....	S....467	4 59	31 51N	15 40	*nf*	.... 4.571	
1824	3	72	26 Bode Orion. 1 & 2	H & S.49	4 49	14 15N	34 36	*np*	... 38.827	
....	..	..	.....1 & 3	.....	....	....	1 12	*nf*	.....	
1824	3	73	IV. 43.....	H & S.50	5 0	8 53S	10 6	*nf*	... 21.763	Position hardly changed.
1826	1	315	.....	S. Re-exam.	....	....	8 42	*nf*	... 21.916	Epoch 1825.06.
1826	1	67	H. C. 203.....	S....468	5 0	13 47N	72 37	*sf*	... 27.183	
1824	3	73	Capella.....	H & S.51	5 4	45 48N	78 2	*np*	.7 34.206	
1824	3	74	14 Aurigæ.....	H & S.52	5 4	32 28N	45 37	*sp*	... 14.610	Pos. changed 8°: Dist. unchanged.
1826	1	67	145.21 or Nova? ...	S....469	5 4	2 38N	28 1	*nf*	.... 7.054	
1826	1	68	H. C. 562.....	S....470	5 5	17 40S	7 38	*np*	... 48.304	
1826	1	68	II. 48.....	S....471	5 5	33 9N	17 37	*sp*	.... 2.822	Probably unchanged.
1824	3	75	β Orionis.....	H & S.53	5 6	8 25S	69 19	*sp*	.... 8.878	Pos. unchanged: Dist. scarcely changed.
1826	1	69	λ Aurigæ A and B..	S....472	5 6	39 58N	55.24	*nf*	.1 42.143	Sir W. H. gives no measures of this star.
....	..	..	.....A and C..	.....	....	....	8 30	*nf*	.3 13.941	
1826	1	70	H. C. 467.....	S....473	5 10	15 26S	34 1	*np*	... 20.844	
1826	1	70	H. C. 313.....	S....474	5 11	10 56S	2 49	*np*	... 10.939	
1826	1	71	82 Bode Orion.....	S....475	5 12	8 13S	86 46	*nf*	... 35.678	Pos. unchanged; Distance differs 6'.
1826	1	72	H. C. 562.....	S....476	5 12	18 43S	72 41	*nf*, *sp*	... 39.713	
1824	3	76	23 Orionis.....	H & S.54	5 13	3 21N	62 40	*nf*	... 33.043	Unchanged.
1826	1	72	IV. 101.....	S....477	5 13	34 43N	76 14	*np*	... 31.964	Position unchanged; Distances not comparable.
1826	1	73	111 Tauri.....	S....478	5 14	17 13N	1 17	*np*	.1 1.763	No material change.
1826	1	73	Nova A and B.....	S....479	5 16	1 39N	51 21	*sp*	... 46.630	
.....	..	74	.....A and C.....	.....	....	....	54 45	*nf*	.2 38.162	
1826	1	74	I. 52.....	S....480	5 16	1 45N	50 48	*np*	.... 2.982	Position unchanged.
1826	1	76	I. 53.....	S....481	5 17	2 46N	40 29	*nf*	... 3.393	Position unchanged.
1826	1	77	H. C. 563.....	S....482	5 17	11 28S	75 54	*sp*	... 11.392	
1826	1	77	Nova.....	S....483	5 17	33 38N	30 53	*nf*	.1 27.602	
1824	3	77	118 Tauri.....	H & S.55	5 18	25 0N	75 59	*sp*	.... 5.666	Unchanged.
1826	1	78	Nova.....	S....484	5 18	33 21N	80 1	*sf*	... 58.955	
1826	1	78	IV. 110.....	S....485	5 19	29 24N	81 52	*np*	... 15.446	Position changed 6° 58'.
1824	3	78	32 Orionis.....	H & S.56	5 21	5 48N	66 49	*sp*	<1.300	Binary? mean motion —0°.414.
1824	3	78	near 33 Orion.....	H & S.57	5 21	3 11N	62 41	*sf*	... 24.731	
1824	3	79	III 93.....	H & S.58	5 22	16 55N	52 4	*sf*	.... 9.790	Pos. unchanged.
1826	1	316	.....	S. Re-exam.	....	....	51 18	*sf*	... 10.861	Epoch 1824.99.
1824	3	80	33 Orionis 1 and 2..	H & S.59	5 22	3 9N	63 21	*nf*	.... 2.025	Unchanged.
.....	.....	.....	..... 1 and 3..	.....	....	....	55 54	*np*	.4 19.734	
1824	3	81	ϑ Orionis.....	H & S.60	5 23	0 27S	89 57	*nf*	... 54.875	Unchanged.
1824	3	82	Nova.....	H & S.61	5 23	2 39N	83 9	*np*	.1 8.912	
1824	3	82	λ Orionis.....	H & S.62	5 25	9 48N	49 14	*nf*	.... 5.574	Unchanged.
1826	1	79	θ Orionis A and B...	S....486	5 26	5 32S	40 48	*np*	... 13.453	
.....	..	80	.....A and C...	.....	....	....	29 56	*nf*	... 13.582	
.....	.....	.....	.....A and D...	.....	....	....	75 3	*np*	... 16.685	
.....	..	81	.....A and E...	.....	....	....	58 28	*nf*	.1 58.114	
1826	1	83	I. 70.....	S....487	5 26	21 53N	21 39	*sp*	.... 2.970	Pos. changed 14°.45; probably is Binary.
1826	1	84	Nova.....	S....488	5 26	5 34S	1 46	*sf*	... 52.418	
.....	.....	.....	A of S.486; and A of S. 488	.....	....	....	43 36	*sf*	.2 14.866	
1826	1	85	Nova.....	S....489	5 26	6 7S	49 11	*sp*	... 37.116	

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					h. m.	° ′	° ′		′ ″	
1826	1	86	Nova	S....490	5 27	5 34 S	55 56	*sp*	.1 17.680	
1826	1	86	ι Orionis; A and B...	S....491	5 27	6 2 S	51 58	*sf*	... 12.085	Pos. changed 8° 7′. } Distances but
.....	..	87	.....A and C...	.....	....	.....	13 26	*sf*	... 49.784	Pos. changed only 2° 7′. } little changed.
1826	1	88	26 Aurigæ.....	S....492	5 27	30 22 N	1 38	*sp*	... 12.327	Pos. changed 4° 14′; Dist. diminished 1″.1.
1824	3	83	σ Orionis; A and B ..	H & S.63	5 30	2 43 S	6 41	*nf*	... 12.912	Unchanged.
.....	..	..	..... A and C ..	.....	....	.....	28 57	*nf*	... 42.765	Unchanged.
.....	..	84	..... A and D..	H & S.64	....	.....	52 57	*np*	.3 30.805	
.....	..	85	..... A and G..	H & S.65	....	.....	33 44	*sf*	.5 10.131	
.....	..	..	..... A and H..	.....	....	.....	31 11	*nf*	.8 45.375	
.....	..	86	..... D and E..	H & S.66	....	.....	3 39	*sp*	... 11.136	Pos. unchanged.
.....	..	87	..... D and F..	.....	....	.....	68 11	*nf*	.1 8.255	Very little changed.
1826	1	89	Nova	S....493	5 30	0 15 S	8 9	*sp*	.2 18.317	
1826	1	89	Nova	S....494	5 30	0 15 S	27 51	*np*	... 11.523	
1826	1	90	H. C. 260.....	S....495	5 30	29 23 N	77 12	*nf*	... 26.501	
1826	1	90	H. C. 262	S....496	5 30	15 15 N	4 49	*np*	.... 9.867	
1824	3	87	ζ Orionis; A and B ..	H & S.67	5 32	2 3 S	60 3	*sf*	.... 2.625	
.....	..	..	..... A and C ..	.....	....	.....	82 50	*nf*	.....	
1826	1	91	187 Bode Orion....	S....497	5 37	4 20 S	3 7	*nf*	.... 7.667	
1826	1	92	γ Leporis.....	S....498	5 37	22 31 S	79 25	*np*	.1 33.844	Sir W. H. gives no measures of this star.
1826	1	92	52 Orionis.....	S....499	5 38	6 23 N	69 19	*sp, nf*	.... 1.654	Perfectly unaltered.
1826	1	93	H. C. 209	S....500	5 38	32 56 N	1 6	*nf*	... 59.460	
1826	1	94	Nova	S....501	5 40	8 28 S	87 54	*sp*	... 21.558	
1826	1	94	H. C. 313.....	S....502	5 45	13 50 N	39 10	*sf*	... 45.524	
1826	1	95	Nova; A and B	S....503	5 46	13 55 N	44 9	*sf*	... 39.946	
.....	..	..	.... A and C	.....	....	.....	67 17	*np*	.3 21.704	
1824	3	89	θ Aurigæ.....	H & S.68	5 47	37 11 N	82 16	*np*	.2 5.051	
1826	1	96	H. C. 319	S....504	5 51	20 10 S	12 22	*sp, nf*	.... 5.253	
1826	1	96	Nova	S....505	5 58	14 2 N	84 9	*nf*	... 24.662	
1824	3	403	41 Aurigæ.....	H & S 366	5 58	48 44 N	83 16	*np*	.... 8.809	
1826	1	97	Nova	S....506	5 59	14 0 N	19 33	*sf*	.... 2.750	
1826	1	97	Nova	S....507	5 59	14 0 N	47 33	*sp*	... 39.696	
1826	1	98	Struve, 216.....	S....508	6 0	2 32 N	22 39	*sf*	... 29.187	
1826	1	99	Nova	S....509	6 4	14 26 N	71 57	*sp*	.2 48.939	
1826	1	99	H. C. 313; A and B..	S....510	6 4	14 32 N	6 43	*sp*	.... 5.930	
.....	..	100	..... A and C..	.....	....	.....	64 43	*nf*	.1 47.879	
1826	1	100	H. C. 315	S....511	6 4	36 12 N	54 13	*sp*	... 11.654	
1826	1	101	H. C. 383	S....512	6 7	47 11 N	0 32	*sp*	.... 8.238	
1826	1	101	Nova	S....513	6 11	21 14 N	12 50	*sp*	... 58.913	
1826	1	102	5 Lyncis	S....514	6 11	58 30 N	2 7	*np*	.1 35.445	Perfectly unchanged in Pos.
1826	1	102	Nova	S....515	6 12	26 47 N	78 40	*np*	... 18.999	
1826	1	103	Nova; A and B	S....516	6 12	24 53 S	87 5	*nf*	.1 6.271	
.....	..	..	.....A and C.....	.....	....	.....	27 43	*sp*	.4 59.975	
1824	3	91	8 Monocerot.	H & S.69	6 14	4 41 N	64 39	*nf*	... 14.379	
1826	1	387	.....	S. Re exam	....	.....	64 47	*nf*	... 14.147	Epoch 1826.13.
1826	1	104	Nova	S....517	6 14	16 32 S	77 42	*sp, nf*	... 23.830	
1826	1	104	H. C. 323	S....518	6 16	16 8 S	0 28	*nf*	... 15.600	
1824	3	92	15 Geminor.....	H & S.70	6 17	20 54 N	65 21	*sp*	... 32.693	Unchanged.
1826	1	105	229 Bode Aurig.	S....519	6 19	52 35 N	49 26	*np*	.... 5.223	
1826	1	105	H. 89.....	S....520	6 19	5 24 N	50 27	*nf*	.... 6.964	Perfectly unchanged.
1824	3	93	11 Monocer. A and B	H & S.71	6 20	6 55 S	39 29	*sf*	.... 6.862	Unchanged.
1824	3	93	..... B and C	.....	....	.....	10 41	*sf*	.... 3.243	Unchanged.
1824	3	93	..... Comes .	.....	....	.....	67 20	*np*	.....	
1826	1	316	..... A and B	S. Re-exam.	....	.....	40 23	*sf*	.... 7.990	Epoch 1824.12.
1826	1	317	..... B and C	S. Re-exam.	....	.....	13 39	*sf*	.... 3.278	Epoch 1824.12.
1826	1	317	..... Comes .	S. Re-exam.	....	.....	66 33	*np*	.4 10.957	Epoch 1824.12.
1824	3	94	20 Geminor.....	H & S.72.	6 22	17 54 N	61 3	*sp*	... 19.454	
1826	1	388	.....	S. Re-exam.	....	.....	60 38	*sp*	... 20 251	Epoch 1826.09.
1826	1	106	H. C. 208	S....521	6 22	38 40 N	42 56	*sf*	.... 3.613	

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					h. m.	° ′	° ′		″	
1826	1	106	III. 75	S....522	6 22	5 33 N	15 25	*np*	... 10.774	
1826	1	107	142.2 or Nova?	S....523	6 22	11 22 N	85 13	*nf*	... 16.882	
1826	1	107	STRUVE, 233; A and B	S....524	6 23	22 15 N	27 11	*sp*	... 53.280	
.....	..	108	..... A and C	.....	....	.....	59 39	*sf*	.1 46.511	
1826	1	109	145.60; or Nova? ..	S....525	6 24	41 15 N	16 10	*nf*	.... 25.585	
1826	1	109	I. 84	S....526	6 26	41 43 N	4 59	*nf*	.... 1.664	Pos. changed 9°; probably a Binary system.
1824	3	404	15 BODE Telesc.	H&S 367	6 26	41 40 N	43 0	*sf*	... 28.064	
1826	1	110	Nova	S....527	6 27	23 19 N	67 48	*sf*	... 15.905	
1826	1	111	Nova	S....528	6 28	31 44 N	64 4	*nf*	.1 20.691	
1826	1	111	Nova; A and B	S....529	6 28	12 23 N	72 56	*sf*	.1 31.995	
.....	..	..	.... A and C	.....	....	.....	80 45	*sf*	.3 7.913	
1824	3	94	ρ Canis Maj.	H & S 73	6 29	18 31 S	10 8	*sp*	... 17.240	Changed in pos. ? in Dist.
1826	1	112	STRUVE, 238	S....530	6 29	59 37 N	46 48	*sf*	.... 4.063	
1824	3	95	12 Lyncis A and B..	H & S.74	6 30	59 37 N	68 39	*sf*	.... 2.593	Binary; —0°.5574 per ann.
1824	3	95	..... A and C..	.....	....	.....	36 50	*np*	.... 9.849	Pos. changed + 0°.009 per ann.
1826	1	318	..... A and B..	S. Re-exam.	....	.....	64 21	*sf*	.... 2.529	Epoch 1825.25.
1826	1	318	..... A and C..	S. Re-exam.	....	.....	35 21	*np*	.... 9.184	Epoch 1825.25.
1826	1	113	II. 72	S....531	6 33	55 54 N	10 57	*nf*	.... 4.519	Pos. unchanged.
1826	1	113	H. C. 267	S....532	6 33	7 49 S	79 49	*sp*	... 12.607	
1826	1	114	ι Geminor.	S....533	6 33	25 18 N	3 42	*sf*	.1 51.577	Distance unaltered.
1824	3	97	56 Aurigæ	H & S.75	6 34	43 45 N	72 52	*nf*	... 55.386	Pos. unchanged.
1826	1	114	Nova	S....534	6 36	22 15 S	53 13	*sf*	... 18.252	
1826	1	115	H. C. 365	S....535	6 40	75 30 N	65 47	*nf*	... 12.538	
1826	1	116	59 Aurigæ	S....536	6 41	39 5 N	48 19	*sp*	... 21.601	No material change.
1826	1	116	Nova	S....537	6 42	23 55 S	11 51	*np*	... 30.305	
1826	1	117	Nova	S....538	6 42	23 55 S	86 44	*nf*	... 27.806	
1826	1	117	STRUVE, 250	S....539	6 43	46 47 N	60 36	*sp*	.... 8.229	
1824	3	98	38 Geminor.	H & S.76	6 44	13 24 N	84 24	*sf*	.... 5.528	Distance diminished.
1826	1	118	π^2 Canis Maj. A and B	S....540	6 47	20 11 S	57 57	*sf*	... 45.033	Pos. changed 6° 15'; Distance is perfectly
.....	..	..	..... A and C	.....	....	.....	85 42	*sp*	... 52.957	unchanged.
.....	..	..	..... A and D	.....	....	.....	84 44	*sp*	.2 8.360	
1826	1	119	Nova; A and B	S....541	6 50	22 24 S	46 52	*nf*	... 24.097	
.....	..	120	..... A and C	.....	....	.....	32 10	*sf*	.....	
1826	1	120	I. 69	S....542	6 51	53 1 N	66 54	*sf*	.... 3.891	Pos. changed 10° 30'; prob'. a Bin. system.
1824	3	99	ζ Geminor.	H & S.77	6 53	20 50 N	85 27	*np*	.1 31.032	Pos. slightly changed.
1826	1	121	Nova	S....543	6 54	22 25 S	1 25	*np*	.1 31.432	
1826	1	121	Nova	S....544	7 2	22 35 N	49 51	*sp, nf*	.... 9.427	
1826	1	122	1790; 387	S....545	7 5	73 23 N	8 32	*nf*	... 31.085	
1824	3	100	19 Lyncis A and B..	H & S.78	7 8	55 37 N	43 5	*sp*	... 14.544	Scarcely changed.
.....	..	..	.....A and C..	.....	....	.....	80 45	*sf*	.3 33.357	
1824	3	101	20 Lyncis	H & S.79	7 9	50 27 N	17 21	*sp*	... 15.966	
1826	1	389	.....	S. Re-exam.	....	.....	16 56	*sp*	... 15.066	Epoch 1826.10.
1824	3	102	δ Geminor.	H & S.80	7 9	22 18 N	74 35	*sp*	.... 7.248	Probably unchanged.
1826	1	122	Nova; A and B	S....546	7 10	31 48 N	89 22	*np*	.1 19.600	
.....	..	..	.... A and C.....	.....	....	.....	20 47	*nf*	.2 22.637	
1826	1	123	III. 48	S....547	7 15	20 48 N	50 44	*nf*	.... 6.516	—0°.166 per ann. Binary?
1826	1	124	V. 66	S....548	7 17	22 30 N	5 52	*np*	...35. 619	Not materially changed.
1824	3	404	63 Geminor.	H&S 368	7 17	21 49 N	56 16	*np*	.....	
1826	1	124	H. C. 314; A and B..	S....549	7 20	14 13 N	39 41	*nf*	.... 7.999	
.....	..	125	..... A and C..	.....	....	.....	39 35	*sf*	.1 51.627	
1826	1	125	H. C. 281	S....550	7 20	18 8 S	26 12	*sf*	... 40.041	
1826	1	126	H. C. 261	S....551	7 21	5 37 N	24 46	*sp*	.... 4.599	
1824	3	103	α Geminor. A and B	H & S.81	7 23	32 17 N	3 57	*sp*	.... 5.355	Binary; mean mot. = —0°.965.
.....	..	106	.....A and C	.....	....	.....	71 34	*sf*	.1 10.180	
.....	..	107	.....A and D	.....	....	.....	45 45	*sp*	.3 17.114	
1826	1	320	.....A and B	S. Re-exam.	....	.....	6 42	*sp*	.... 4.767	Epoch 1825.26.
1826	1	126	145.19; or Nova?...	S....552	7 27	23 4 S	14 53	*np*	.... 9.007	
1826	1	127	34 BODE Off. Typ...	S....553	7 28	14 6 S	33 20	*np*	.... 7.437	No material change.
1826	1	127	Nova	S....554	7 28	14 7 S	54 41	*nf*	.... 20.276	
1826	1	128	Nova	S....555	7 28	14 4 S	42 17	*sp*	.1 34.731	

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					h. m.	° ′	° ′		′ ″	
1826	1	129	P. VII. 159	S....556	7 28	65 34 N	85 43	*nf*	.. 16.175	
1826	1	129	Nova	S....557	7 29	14 3 S	66 51	*np*	1 6.356	
1824	3	107	31 Bode Can. Min.	H & S. 82	7 31	5 43 N	37 8	*sf*	.....	Binary? Pos. changed — 10°.
1826	1	390		S. Re-exam.	....	.....	40 40	*sf*	...1.405	Epoch 1826.18.
1826	1	130	H. C. 275	S....558	7 33	3 6 S	31 54	*sp*	.. 19.886	
1826	1	130	Pollux; A and B	S....559	7 34	28 28 N	17 20	*nf*	3 18.467	
....	..	131	.....A and C	.....	....	.....	23 37	*nf*	2 12.312±	No material change in Pos.
1824	3	109	ψ Geminor.	H & S. 83	7 36	33 51 N	69 55	*np*	1 33.984	
1824	3	110	2 Argo Navis	H & S. 84	7 37	14 15 S	69 27	*np*	.. 19.660	Pos. unchanged.
1826	1	132	V. 67	S....560	7 37	29 13 N	89 22	*np*	1 30.598	Identity with Sir W. H's star dubious.
1824	3	110	201 Bode Geminor.	H & S. 85	7 38	18 47 N	0 9	*sp*	... 6.384	Unchanged.
1826	1	132	Nova	S....561	7 41	25 16 S	88 0	*nf*	.. 50.898	
1824	3	112	2 Bode Ursæ Maj.?	H & S. 86	7 46	63 34 N	6 48	*nf*	.. 46.647	
1824	3	112	14 Canis Min. 1 and 2	H & S. 87	7 49	2 47 N	24 18	*nf*	1 16.021	Dist. increased greatly.
....	..	..	.....1 and 3	.....	....	.....	62 50	*sf*	1 52.168	(Single measures.)
1826	1	133	Nova	S....562	7 49	79 59 N	80 5	*nf*	. 21.440	
1824	3	113	11 Cancri	H & S. 88	7 58	28 0 N	84 30	*np*	... 4.498	Unchanged.
1826	1	321		S. Re-exam.	....	.....	83 15	*np*	... 4.676	
1824	3	114	29 Monocer. 1 and 2.	H & S. 89	8 0	2 28 S	27 1	*sp*	1 6.503	
....	..	..	.....1 and 3.	.....	....	.....	30 16	*sp*	3 18±	Distance an inaccurate estimation only.
1826	1	133	Nova	S....563	8 0	19 18 S	34 20	*sp*	2 13.702	
1824	3	115	ζ Cancri	H & S. 90	8 2	18 11 N	68 17	*sf*	... 6.241	Binary? —0°.5813 per ann.
1826	1	323	.....A and B	S. Re-exam.	....	.....	32 10	*nf*	... 1.086	Epoch 1825.27. perhaps a Ternary
....	..	325	.....A and C	.....	....	.....	67 55	*sf*	... 5.436	system.
1826	1	134	H. C. 263	S....564	8 2	1 48 N	68 33	*np, sf*	.. 33.021	
1824	3	91	19 Argo Navis	H & S. 91	8 3	12 24 S	14 3	*sp*	1 10.175	
1826	1	134	H. C. 54	S....565	8 12	42 34 N	74 48	*sf*	1 13.040	
1826	1	135	ϕ^1 Cancri	S....566	8 15	28 26 N	68 12	*nf*	2 0.945	
1826	1	136	Nova	S....567	8 15	20 43 N	79 25	*sp*	.. 37.782	
1824	3	117	24 ν Cancri	H & S. 92	8 16	25 7 N	52 13	*nf*	... 6.046	Binary? —0°.514 per ann. and Dist. incr. 2″.
1826	1	328		S. Re-exam.	....	.....	52 30	*nf*	... 6.742	Epoch 1825.26.
1824	3	118	ϕ^2 Cancri	H & S. 93	8 16	27 31 N	58 47	*sp, nf*	... 5.514	Unchanged.
1826	1	136	Nova	S....568	8 17	23 27 S	5 0	*nf*	.. 40.635	
1826	1	137	Nova	S....569	8 23	25 25 S	71 34	*np*	..39.723 ±	
1824	3	120	18 Bode Hydræ	H & S. 94	8 26	7 15 N	65 57	*nf*	.. 10.844	Scarcely changed in Pos.
1826	1	138	Nova; A and B	S....570	8 29	20 15 N	6 32	*nf*	.. 57.517	
....	..	..	.....A and C	.....	....	.....	74 44	*np*	2 57.987	
1826	1	139	Nova; A and B	S....571	8 30	20 8 N	67 1	*sf*	.. 45.037	
....	..	..	.....A and C	.....	....	.....	29 2	*sp*	1 32.257	
1826	1	140	Nova	S....572	8 30	20 16 N	0 16	*nf*	1 15.946	
1826	1	140	Nova	S....573	8 30	20 15 N	37 2	*nf*	.. 20.692	
1826	1	141	Nova	S....574	8 30	20 8 N	21 2	*sp*	2 12.803	
1826	1	142	IV. 54	S....575	8 31	6 25 N	59 47	*nf*	.. 27.383	No appreciable change.
1826	1	142	P. VIII. 131	S....576	8 31	49 30 N	60 58	*np*	.. 10.316	
1826	1	143	H. C. 270	S....577	8 33	11 33 S	31 9	*np*	... 5.589	
1826	1	143	Nova	S....578	8 33	11 16 S	32 6	*np*	.. 30.808	
1826	1	144	31 Monocerotis	S....579	8 35	6 35 S	38 35	*np*	1 17.918	Very slightly, if at all changed.
1824	3	122	48 ι Cancri	H & S. 95	8 36	29 25 N	37 42	*np*	.. 29 387	Unchanged. ? colour.
1826	1	144	P. VIII. 160	S....580	8 36	1 57 S	11 34	*sp*	... 4.951	
1826	1	145	H. C. 218	S....581	8 37	11 50 N	83 27	*np*	.. 13.324	
1824	3	123	145.144	H & S. 96	8 39	71 27 N	58 51	*sp, nf*	... 8.745	
1826	1	145	130 Bode Lyncis	S....582	8 39	35 45 N	7 36	*sf, np*	... 3.661	
1824	3	124	IV. 111	H & S. 97	8 41	15 29 N	34 16	*sf*	.. 16.521	Pos. changed — 5° 16′.
1826	1	146	σ^1 Cancri	S....583	8 41	33 9 N	66 44	*nf*	1 22.101 ±	Not measured by Sir W. H.
1824	3	125	57 ι 2 Cancr.	H & S. 98	8 43	31 16 N	70 11	*np*	... 1.894	Unchanged.

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					h. m.	° ′	° ′		′ ″	
1824	3	125	17 Hydræ	H & S.99	8 47	7 17 S	86 8	*np, sf*	5.723	Unchanged.
1826	1	146	Nova	S....584	8 47	10 43 S	58 49	*sp*	.1 11.189	
1826	1	147	Nova	S....585	8 47	17 34 S	53 12	*np*	.1 9.363	
1824	3	126	σ^1 Cancri	H&S 100	8 49	33 7 N	24 49	*np*	.1 29.731	Pos. unchanged.
1826	1	147	σ^4 Cancri	S....586	8 50	32 57 N	45 25	*sf*	4.850	
1824	3	127	67 ρ Cancri	H&S 101	8 51	28 36 N	52 40	*np*	.1 43.144	Pos. unchanged.
1826	1	148	Nova	S....587	8 52	82 8 N	48 57	*np*	24.342	
1826	1	148	Nova	S....588	8 55	16 57 S	58 48	*np*	30.232	
1824	3	127	194 Bode Cancri	H&S 102	8 57	23 42 N	68 37	*sp*	7.640	Pos. unchanged; Dist. — 1″.19.
1826	1	149	H. C. 258	S....589	8 57	3 31 N	2 35	*sf, np*	12.140	
1826	1	149	Struve, 325	S....590	8 58	53 6 N	56 31	*sf*	5.513	
1824	3	128	53 Bode Urs. Maj.	H&S 103	8 59	62 24 N	64 49	*nf*	25.346	
1826	1	150	Nova	S....591	9 0	16 0 N	29 56	*nf*	7.634	
1826	1	150	Struve, 328	S....592	9 1	53 28 N	44 13	*nf*	20.796	
1826	1	151	Nova	S....593	9 4	79 15 N	81 14	*sf*	29.320	
1824	3	129	38 Lyncis	S....104	9 7	37 34 N	27 20	*sp*	2.887	Unchanged.
1826	1	151	H. C. 215	S....594	9 7	24 24 N	73 25	*nf*	7.107	
1826	1	152	Nova	S....595	9 10	19 35 S	10 2	*np*	.1 1.147	
1826	1	152	39 Lyncis	S....596	9 10	50 18 N	49 40	*np*	6.059	
1824	3	405	*nf* 40 Lyncis	H&S 369	9 10	35 9 N	57 15	*nf*	.3 22.287	
1824	3	131	27 Hydræ	H&S 105	9 12	8 48 S	59 21	*sp*	.3 45.689	Pos. unchanged.
1824	3	405	21 Urs. Maj. 1 and 2	H&S 370	9 13	54 47 N	39 2	*np*	6.474	
.....	..	..	.....1 and 3	.....	....	.....	74 36	*np*	.4 45.000	
1826	1	153	H. C. 324	S....597	9 14	4 17 N	40 25	*np*	22.169	
1826	1	153	IV. 55	S....598	9 17	46 26 N	71 31	*sf*	.1 26.649	
1824	3	406	23 λ Urs. Maj.	H&S 371	9 17	63 51 N	0 33	*np*	27.332	
1826	1	154	H. C. 273	S....599	9 18	7 1 N	57 41	*np, sf*	3.513	
1826	1	154	σ^2 Leonis	S....600	9 19	9 50 N	....	..	.....	
1826	1	391	.....	S. Re-exam.	....	.....	64 14	*sf*	.....	
1824	3	131	τ Hydræ	H&S 106	9 20	2 0 S	86 49	*nf*	.1 6.683	Pos. very slightly changed.
1826	1	155	Struve, 345	S....601	9 21	73 52 N	44 41	*sf*	5.090	
1824	3	132	6 Leonis	H&S 107	9 22	10 30 N	15 27	*nf*	38.128	Scarcely altered.
1826	1	155	Struve, 347	S....602	9 23	2 16 N	74 16	*sf*	3.766	
1826	1	156	H. C. 215; A and B	S....603	9 24	40 46 N	57 7	*sf*	24.581	
.....	..	..	.....A and C	.....	....	.....	55 25	*np*	.1 58.608	
1824	3	132	7 Leonis	H&S 108	9 26	15 10 N	9 25	*nf*	44.199	Unchanged.
1826	1	157	Nova	S....604	9 27	18 48 S	0 30	*sf*	51.840	
1824	3	133	14 Leonis	H&S 109	9 32	10 43 N	53 38	*nf*	.1 10.829	Changed in Pos. and Dist.?
1826	1	157	9 Sextant.	S....605	9 45	5 48 N	22 43	*np*	51.022	
1826	1	158	H. C. 212	S....606	9 47	20 37 N	84 41	*sf*	30.071	
1824	3	133	40 Bode Felis	H&S 110	9 56	17 12 S	2 45	*np*	21.498	
1826	1	159	H. C. 283	S....607	9 58	18 26 S	56 12	*np, sf*	11.352	
1824	3	134	o Leonis	H&S 111	9 59	12 51 N	37 16	*np*	.2 54.906	Slight change in Pos.
1824	3	135	145.145	H&S 112	10 3	71 55 N	75 20	*sf*	16.843	
1824	3	136	7 Leonis 1 and 2	H&S 113	10 10	20 45 N	8 24	*sf*	3.243	Binary; mean mot. + 0° 30′ per ann.
.....	..	137	.....1 and 3	.....	....	.....	27 30	*np*	.....	
1826	1	330	.....1 and 2	S. Re-exam.	....	.....	11 17	*sf*	2.716	Epoch 1825.30.
1824	3	139	145 Bode Leonis	H&S 114	10 11	7 22 N	80 15	*nf*	6.723	Pos. changed 4°.47; Dist. unaltered.
1824	3	140	155 Bode Leonis	H&S 115	10 14	6 38 N	60 23	*np*	.1 0.387	Unchanged.
1826	1	159	I. 23	S....608	10 16	9 39 N	26 1	*nf*	3.632	Unchanged.
1826	1	160	H. C. 150	S....609	10 22	22 58 N	65 30	*sf*	14.205	
1826	1	161	Nova	S....610	10 26	16 54 S	54 6	*nf*	.1 40.865	
1826	1	161	Nova	S....611	10 33	13 49 S	76 15	*sp*	59.331	
1824	3	141	35 Sextant. 1 and 2	H&S 116	10 34	5 42 N	32 26	*sp*	.0 7.809	
.....	..	..	.....1 and 3	.....	....	.....	60 50	*sp*	.5 33.500	Single measure.
1826	1	162	42 Leon. Min.	S....612	10 36	31 37 N	82 36	*sf*	.3 20.304	

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					h m	° ′	° ′		′	
1826	1	162	P. X. 159	S....613	10 39	14 41 S	78 57	*nf*	... 31.651	
1826	1	163	H.C. 331; A & B	S....614	10 39	14 20 S	72 26	*sp*	.... 7.262	
....	..	....	.....A & C	.....	....	.....	68 44	*sp*	.1 17.861	
1826	1	164	Nova	S....615	10 39	13 44 S	88 44	*np*	.1 26.078	
1826	1	164	P. X. 179	S....616	10 43	8 25 N	35 21	*np*	... 12.510	
1826	1	165	H. C. 227	S....617	10 45	1 17 S	87 47	*sf*	... 35.223	
1824	3	142	54 Leonis	H&S 117	10 46	25 43 N	8 19	*sf*	.... 7.023	Unchanged.
1826	1	165	Nova	S....618	10 47	20 9 S	54 16	*sp*	.1 19.101	
1824	3	143	V. 111	H&S 118	10 49	59 50 N	51 46	*nf*	... 35.010	Distance increased?
1826	1	166	II. 78	S....619	10 57	8 0 N	74 1	*sf*	.... 8.637	Unchanged.
1826	1	167	Nova	S....620	10 58	12 28 S	73 19	*nf*	... 32.698	
1826	1	167	1790.386; A and B	S....621	11 0	66 59 N	64 30	*nf*	... 43 431	
....	..	168	.....A and C	.....	....	.....	26 34	*np*	.3 23.201	
1826	1	168	1790.389	S....622	11 3	74 26 N	26 16	*np*	... 12.479	
1824	3	144	145.68	H&S 119	11 6	53 44 N	75 29	*np*	... 13.144	
1826	1	169	H. C. 61	S....623	11 6	28 33 N	5 13	*nf*	.... 4.103	
1824	3	407	145.104	H&S 372	11 7	15 22 S	36 ±	*np*	... 20 ±	
1824	3	145	145.26	H&S 120	11 8	6 8 S	7 37	*sf*	.1 7.062	
1824	3	145	φ Leonis	H&S 121	11 8	2 40 S	16 56	*np*	.1 46.256	Much changed in Pos. and Dist.
1824	3	146	ξ Ursæ Maj.	H&S 122	11 9	32 33 N	11 33	*sp*	.... 2.809	Binary.
1826	1	331		S. Re-exam.	....	.....	25 28	*sp*	.... 2.442	Epoch 1825.25.
1826	1	169	H. C. 498	S....624	11 10	0 40 S	18 1	*sp*	... 10.145	
1826	1	170	H. C. 223	S....625	11 10	15 16 N	79 40	*nf*	.... 4.927	
1824	3	151	201 Bode Camelop.	H&S 123	11 17	82 2 N	43 13	*np*	... 21.876	
1824	3	151	83 Leonis	H&S 124	11 18	4 0 N	61 7	*sf*	.... 29.542	Pos. changed + 6° 11′.
1824	3	152	τ Leonis	H&S 125	11 19	3 50 N	79 8	*sf*	.1 35.217	Much increased in Dist.
1826	1	170	57 Urs. Maj.	S....626	11 19	40 20 N	79 45	*nf*	.... 6.294	Diff. of Pos. = 4° 9′.
1824	3	153	145.70	H&S 126	11 21	42 21 N	0 21	*sf*	... 13.040	
1826	1	171	Nova	S....627	11 21	16 26 S	60 45	*np*, *sf*	... 28.959	
1826	1	172	1790; 381	S....628	11 21	60 40 N	0 22	*sf*	... 13.040	
1824	3	153	88 Leonis	H&S 127	11 23	15 22 N	50 14	*np*	... 14.670	Scarcely altered.
1824	3	154	90 Leonis 1 and 2	H&S 128	11 25	17 48 N	61 8	*sp*	.... 4.452	No change.
....	..	....	..... 1 and 3	.....	....	.....	36 41	*sp*	.1 0.753	Pos. unchanged.
1826	1	172	Nova	S....629	11 28	22 25 N	5 34	*np*	... 44.374	
1826	1	173	H. C. 64	S....630	11 30	27 57 N	4 0	*nf*	.... 5.592	
1824	3	156	93 Leonis	H&S 129	11 38	21 13 N	86 15	*np*	.1 14.897	
1824	3	157	Nova	H&S 130	11 38	21 2 N	65 3	*nf*	.1 16.861	
1824	3	157	ξ Virginis 1 and 2	H&S 131	11 39	9 15 N	3 25	*np*	.....	
....	..	....	..... 1 and 3	.....	....	.....	53 19	*np*	.....	
1826	1	173	H. C. 385	S....631	11 39	68 19 N	89 4	*sf*	... 11.845	
1826	1	174	IV. 49	S....632	11 43	9 48 N	61 44	*sp*	... 30.382	Pos. changed 5° 14′. Dist. diff. 2″.9
1824	3	158	V. 60	H&S 132	11 44	16 26 N	75 57	*nf*	... 37.112	Pos. changed — 5°.
1824	3	158	65 Urs. Maj. 1 and 2	H&S 133	11 46	47 29 N	55 26	*nf*	.... 4.020	Unchanged.
....	..	....	..... 1 and 3	.....	....	.....	24 17	*sf*	.1 2.185	Scarcely altered.
1824	3	159	2 Comæ Beren.	H&S 134	11 55	22 28 N	31 15	*sp*	.... 3.685	Very little, if at all changed.
1826	1	175	1790; 376	S....633	11 56	52 55 N	4 26	*sf*	.... 8.309	
1826	1	175	H. C. 232	S....634	12 2	15 48 S	7 3	*np*	.... 7.971	
1826	1	176	Nova	S....635	12 2	1 15 S	7 4	*np*	... 23.673	
1824	3	160	H. C. 354	H&S 135	12 3	54 28 N	46 19	*sp*	... 12.102	
1824	3	160	207 Bode Camel.	H&S 136	12 3	82 43 N	13 16	*nf*	.1 3.445	
1824	3	161	H. C. 152	H&S 137	12 6	6 15 S	18 9	*np*	.... 9.225	
1826	1	176	Nova	S....636	12 6	10 58 N	24 37	*sp*	... 26.580	
1824	3	161	2 Canum Ven.	H&S 138	12 7	41 40 N	10 29	*sp*	... 11.534	Unchanged.
1824	3	162	Struve, 408	H&S 139	12 8	81 6 N	50 15	*sp*	... 15.389	
1824	3	163	145.22	H&S 140	12 9	2 56 S	72 58	*sp*	... 21.017	
1824	3	164	55 Bode Com. Ber.	H&S 141	12 12	28 5 N	23 42	*sp*	.... 9.453	

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1824	3	165	17 Virginis	H&S 142	12 13	6 19 N	69 36	*np*	... 20.937	Pos. changed + 11° 15′, arising from
1826	1	333	.....	S. Re-exam.	....	.....	66 15	*np*	... 19.910	Epoch 1825.30. [proper motion.
1824	3	166	12 Com. Ber.	H&S 143	12 13	26 51 N	78 47	*sf*	.1 5.950	Pos. unchanged.
1826	1	177	Nova	S....637	12 18	18 58 S	66 54	*sp*	.1 1.635	
1824	3	167	H. C. 385	H&S 144	12 19	45 50 N	72 52	*sf*	... 11.079	
1826	1	177	Nova	S....638	12 20	26 54 N	19 13	*sp*	.2 24.436	
1824	3	167	β Corvi.....	H&S 145	12 21	15 30 S	56 27	*sp*	... 24.005	Unchanged.
1824	3	168	H. C. 231	H&S 146	12 22	2 20 N	19 39	*np*	... 49.745	
1824	3	169	145.118.	H&S 147	12 25	75 46 N	67 10	*nf*	.... 5.865	
1824	3	169	24 Com. Ber.	H&S 148	12 26	19 22 N	2 7	*np*	... 20.647	Unchanged.
1826	1	178	V. 129	S....639	12 29	3 23 S	15 22	*sf*	... 50.555	
1826	1	179	Nova	S....640	12 29	4 22 S	5 50	*sf*	... 10.197	
1824	3	170	145.38	H&S 149	12 32	12 1 S	29 26	*sf*	.... 6.881	
1826	1	335	.....	S. Re-exam.	....	.....	31 27	*np, sf*	.... 6.077	Epoch 1825.28.
1824	3	171	γ Virginis	H&S 150	12 32	0 27 S	13 24	*sf*	.... 3.794	Binary; mean mot. —0°.667.
1826	1	334	.....	S. Re-exam.	....	.....	6 53	*np*	.... 3.263	Epoch 1825.32.
1824	3	173	III. 53	H&S 151	12 36	2 54 S	78 15	*np*	... 16.766	
1826	1	179	Nova	S....641	12 36	15 20 N	56 35	*sp*	... 33.359	
1824	3	174	H. C. 230	H&S 152	12 40	4 48 N	75 38	*sp*	... 10.109	
1826	1	180	Nova	S....642	12 40	14 58 N	53 50	*nf*	.... 54.421	
1824	3	174	IV. 58 1 and 2.....	H&S 153	12 43	20 9 N	67 49	*sp*	... 16.963	Unchanged.
....	..	..	..... 1 and 3.....	.....	....	.....	59 23	*np*	.4 9.666	
....	..	..	..... 1 and 4.....	.....	....	.....	4 0	*sp*	10 31.644	
1824	3	175	35 Comæ Ber.....	H&S 154	12 44	22 14 N	38 18	*sf*	... 29.494	Unchanged.
1824	3	176	H. C. 73	H&S 155	12 44	16 0 N	79 53	*sp, nf*	.... 7.995	
1826	1	180	Nova	S....643	12 44	17 4 S	25 4	*np*	.... 23.509	
1824	3	176	II. 42	H&S 156	12 46	3 54 S	60 19	*sf*	... 6.758	Pos. changed + 7° 55′.
1824	3	177	P. XII. 221	H&S 157	12 47	12 29 N	73 43	*sf*	.... 29.170	
1824	3	177	12 Can. Ven.	H&S 158	12 48	39 18 N	43 2	*sf*	... 19.764	Unchanged.
1824	3	178	Struve, 430.....	H&S 159	12 48	55 1 N	15 15	*np*	.... 4.136	
1824	3	407	212 Bode Camel....	H&S 373	12 48	84 24 N	57 0	*np*	... 22.069	
1826	1	181	Nova	S....644	12 51	15 18 N	81 9	*sp*	.... 27.159	
1826	1	181	Nova	S....645	12 58	1 35 N	84 48	*nf*	.... 8.098	
1824	3	180	θ Virgin. 1 and 2 ...	H&S 160	13 1	4 34 S	77 8	*np*	.... 8.301	Pos. changed + 7°50′.
....	..	..	..... 1 and 3 ...	.....	....	.....	24 3	*np*	.....	
1826	1	182	Nova	S....646	13 1	16 25 N	72 46	*np*	.... 4.090	
1826	1	183	Nova	S....647	13 1	1 43 S	56 9	*sp*	... 43.129	
1824	3	181	54 Virginis	H&S 161	13 4	17 51 S	56 17	*nf*	.... 6.774	Distance increased.
1826	1	183	Nova	S....648	13 5	19 0 N	25 22	*nf*	.1 28.970	
1824	3	181	P. XIII. 25	H&S 162	13 6	10 24 S	28 21	*nf*	... 44.847	
1824	3	182	H. C. 506	H&S 163	13 15	3 38 N	13 39	*nf, sp*	... 28.465	
1824	3	182	ζ Urs. Maj.	H&S 164	13 17	55 52 N	57 46	*sf*	... 14.455	Unchanged.
1826	1	184	426 Bode Urs. Maj..	S....649	13 22	60 53 N	21 2	*sf*	.3 1.495	
1824	3	185	V. 128	H&S 165	13 23	11 46 S	11 13	*nf*	... 47.720	Distance increased.
1826	1	185	Nova	S....650	13 25	12 33 S	59 10	*sf*	... 45.524	
1824	3	186	H. C. 335?	H&S 166	13 26	27 10 N	24 51	*nf*	.... 9.613	
1826	1	185	Nova	S....651	13 27	25 35 S	77 30	*sp*	... 10.350	
1824	3	186	81 Virginis	H&S 167	13 28	6 57 S	47 16	*nf*	.... 4.020	Pos. changed —5° 4′.
1824	3	408	o 84 Virginis.....	H&S 374	13 34	4 27 N	40 9	*sp*	.... 3.918	Binary? mean mot. = —0°.288.
1826	1	186	Nova	S....652	13 36	9 40 S	56 50	*sf*	... 53.869	
1826	1	186	Nova	S....653	13 38	19 18 N	82 55	*sp*	... 30.517	
1826	1	187	Nova	S....654	13 40	39 25 N	32 13	*sp*	.1 10.844	
1824	3	187	H. C. 335	H&S 168	13 41	27 52 N	70 25	*sf*	.... 5.664	
1826	1	187	Nova	S....655	13 42	18 35 N	14 0	*nf*	... 35.054	
1826	1	188	Nova	S....656	13 42	22 12 N	61 50	*sp*	.1 26.033	
1824	3	188	η Bootis	H&S 169	13 46	19 19 N	29 27	*sf*	.2 6.203	

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1824	3	189	H. C. 162	H&S 170	13 46	33 43 N	58 28	*np*	.... 7.780	
1826	1	188	Nova	S....657	13 46	7 12 S	38 16	*nf*	.... 2.699	
1826	1	189	H.C. 335	S....658	13 51	26 41 N	28 52	*sp*	.... 5.016	
1824	3	190	τ Virginis	H&S 171	13 52	2 26 N	19 57	*np*	.1 19.290	
1824	3	190	145.82	H&S 172	13 54	20 17 N	71 43	*sf*	... 21.392	
1826	1	189	H.C. 233	S....659	13 56	17 12 S	79 27	*sf*	... 32.031	
1826	1	190	Nova	S....660	14 0	22 3 N	69 43	*nf*	.... 4.888	
1826	1	190	Nova	S....661	14 1	2 30 S	62 51	*nf*	.... 7.937	
1826	1	191	Nova	S....662	14 3	29 35 N	17 32	*sf*	.... 13.801	
1824	3	191	145.98	H&S 173	14 5	6 14 N	79 20	*sp*	.... 6.049	
1824	3	191	κ Bootis	H&S 174	14 7	52 39 N	31 15	*sp*	... 13.136	Pos. slightly changed.
1824	3	193	ι Bootis	H&S 175	14 10	52 12 N	56 36	*nf*	... 38.047	Very little changed.
1824	3	194	P. XIV. 62	H&S 176	14 13	6 56 S	77 6	*np*	.... 5.880	
1824	3	195	H. C. 334	H&S 177	14 14	9 16 N	83 24	*sp*	.... 7.185	
1824	3	196	H. C. 470	H&S 178	14 15	12 3 N	65 17	*np*	... 10.192	
1824	3	197	χ Turdi Sol.	H&S 179	14 15	19 8 S	25 49	*np*	... 35.121	
1824	3	198	H. C. 165	H&S 180	14 22	29 6 N	7 36	*sp*	... 25.781	
1824	3	199	π Bootis	H&S 181	14 32	17 12 N	7 53	*sf*	.... 6.889	Unchanged.
1824	3	200	ζ Bootis	H&S 182	14 33	14 31 N	36 58	*sf*	.... 1.683	
1824	3	201	II. 82	H&S 183	14 36	8 27 N	4 27	*sf*	.... 7.335	Unchanged in Position.
1824	3	202	73 Hydræ	H&S 184	14 36	24 40 S	46 40	*sf*	.... 9.995	Changed 8° 25′ in Pos.
1824	3	204	ι Bootis	H&S 185	14 37	27 51 N	52 59	*np*	.... 3.931	Binary; mean mot. + 0°.4378.
1826	1	336	.....	S. Re-exam.	....	.....	54 26	*np*	.... 3.356	Epoch 1825.34.
1826	1	191	Nova	S....663	14 40	23 30 S	50 53	*sp*	... 56.696	
1824	3	208	α Libræ	H&S 186	14 41	15 15 S	44 33	*np*	.3 50.853	
1824	3	208	ξ Bootis	H&S 187	14 43	19 51 N	70 54	*np*	.... 8.696	Greatly changed in Pos. and Dist.
1826	1	338	.....	S. Re-exam.	....	.....	67 0	*np*	.... 7.776	Epoch 1825.37.
1824	3	213	39 Bootis	H&S 188	14 44	49 27 N	44 55	*sf*	.... 4.626	Probably changed in Pos.; our observa-
1824	3	216	145.28	H&S 190	14 48	20 35 S	0 9	*np*	... 10.833	[tions rather dubious.
1824	3	409	18 Libræ	H&S 375	14 49	10 24 S	54 8	*nf*	.... 26.614	
1826	1	192	Nova	S....664	14 53	16 29 N	84 2	*sp*	... 25.837	
1824	3	215	346 Bode Bootis	H&S 189	14 55	48 2 N	68 53	*sf*	... 36.544	Unchanged.
1824	3	216	145.63	H&S 191	14 55	54 33 N	73 10	*np*	... 40.845	
1826	1	192	Nova	S....665	14 55	17 13 S	1 51	*sf*	... 25.270	
1824	3	217	145.37	H&S 192	14 56	6 12 N	76 30	*np*	.. 10.749	
1826	1	193	33 Bode Urs. Min.	S....666	14 56	75 36 N	52 3	*nf*	.2 53.180	
1824	3	218	44 Bootis	H&S 193	14 58	48 21 N	40 53	*sp*	.... 2.277	
1824	3	219	H. C. 472	H&S 194	14 59	9 55 N	60 50	*sp*	.... 4.777	
1824	3	410	24 Libræ 1 and 2	H&S 376	15 2	19 6 S	21 39	*sf*	... 50.629	} 1, 2 and 3 are precisely in a line.
.....	..	..	..... 1 and 3	.....	....	.....	21 39	*sf?*	.....	
1826	1	193	Nova	S....667	15 3	4 55 S	65 39	*np*	... 31.181	
1824	3	220	97 Bode Libræ	H&S 195	15 4	17 45 S	50 58	*sf*	.... 49.037	
1826	1	194	Nova	S....668	15 4	39 38 N	63 50	*np*	... 10.740	
1824	3	221	V. 125	H&S 196	15 5	28 36 N	43 17	*sp*	... 32.553	
1824	3	221	145.62	H&S 197	15 5	19 56 N	80 51	*nf*	... 25.842	
1824	3	222	H. C. 289	H&S 198	15 5	39 22 N	13 29	*np*	... 31.239	
1826	1	195	Nova	S....669	15 5	15 5 N	73 8	*nf*	.... 6.057	
1824	3	222	δ Bootis	H&S 199	15 8	34 0 N	10 31	*nf*	.1 45.333	Slightly changed in Pos.
1824	3	223	H. C. 470	H&S 200	15 10	11 7 N	84 20	*sf*	... 13.268	
1826	1	195	5 Serpentis	S....670	15 10	2 28 N	50 57	*nf*	... 10.698	
1824	3	224	ν Coron. Bor.	H&S 201	15 16	30 57 N	64 3	*nf*	.... 1.577	Scarcely changed.
1824	3	225	H. C. 288	H&S 202	15 18	8 41 S	44 39	*sf*	... 51.760	
1824	3	226	I. 17	H&S 203	15 18	37 59 N	63 42	*np*	.... 1.652	Binary; mean mot. −0°.5783.
1826	1	339	.....	S. Re-exam.	....	.....	63 32	*np*	.... 1.421	Epoch 1825.46.

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1824	3	229	μ Bootis	H & S. 204	15 18	38 1 N	81 51	*sf*	1 48.539	Unchanged.
1826	1	196	Nova	S. 671	15 18	10 20 S	42 44	*sf*	9.573	
1826	1	197	Nova	S. 672	15 22	19 35 S	13 14	*np*	11.468	
1826	1	197	Nova	S. 673	15 23	23 52 S	27 24	*np*, *sf*	9.178	
1824	3	231	ξ Serpentis	H & S. 205	15 26	11 9 N	70 37	*sp*	3.053	Binary; mean mot. — 0°.726.
1826	1	341		S. Re-exam.	.....	....	69 49	*sp*	3.268	Epochs 1825.46 and 1825.42.
1824	3	411	Struve, 489	H & S. 377	15 27	27 20 N	30 20	*sp*	5.941	
1824	3	232	178 Bode Libræ	H & S. 206	15 30	8 11 S	82 46	*sp*	11.862	
1826	1	198	Nova	S. 674	15 32	36 54 N	5 0	*sp*	15.648	
1824	3	233	H. C. 469	H & S. 207	15 33	10 33 S	38 5	*nf*	27.066	
1824	3	234	ζ Coron. Bor.	H & S. 208	15 33	37 11 N	30 57	*np*	7.168	Changed + 5° 6′ in Position.
1824	3	236	145.32	H & S. 209	15 40	36 59 N	53 43	*np*	31.517	
1824	3	237	ν Urs. Min.	H & S. 210	15 40	81 2 N	6 43	*nf*	31.102	
1824	3	238	II. 85	H & S. 211	15 47	1 39 S	55 17	*np*	6.882	Changed — 9° 8′ in Pos. and nearly 3″ in Distance.
1824	3	239	III. 103	H & S. 212	15 48	3 56 N	53 4	*np*	10.665	
1824	3	240	H. C. 343	H & S. 213	15 49	19 24 S	52 10	*np*	19.890	
1826	1	198	Nova; A and B	S. 675	15 51	22 16 N	61 46	*sp*	5.086	
.....	..	199	.... A and C	.....	.....	....	33 34	*sp*	.1 1.533	
1824	3	240	V. 126	H & S. 214	15 52	17 54 N	53 25	*sp*	34.923	
1824	3	241	II. 21; 1 and 2	H & S. 215	15 54	10 56 S	10 57	*sf*	10.601	
.....	..	.....	..... 1 and 3	.....	.....	....	78 39	*np*	.4 41.533	
1824	3	243	ξ Scorpii	H & S. 216	15 54	10 52 S	11 37	*nf*	6.769	Binary? Mean mot. — 0°.256.
1826	1	343	..... A and B	S. Re-exam.	.....	....	81 54	*sf*	1.358	
.....	..	345	..... A and C	.....	.....	....	9 3	*nf*	6.961	Epoch 1825.50. Not the slightest alteration in the Pos. or Dist. of A. and B.
.....	..	346	..... B and C	.....	.....	....	17 30	*nf*	.....	
1826	1	199	ρ Coronæ Bor.	S. 676	15 54	33 52 N	35 6	*sf*	1 19.196	Sir W. H's Pos. = 54° 27′ *sf*. Mr. H. supposes his micrometer was erroneously read off.
1824	3	244	β Scorpii	H & S. 217	15 55	19 18 S	63 30	*nf*	13.650	Unchanged.
1824	3	245	H. C. 159	H & S. 218	15 58	13 49 N	58 44	*np*	31.935	
1824	3	246	κ Herculis	H & S. 219	16 0	17 32 N	80 25	*nf*	31.169	Distance diminished 8″.711.
1824	3	247	ν Scorpii	H & S. 220	16 2	18 58 S	68 12	*np*	40.817	Unchanged.
1824	3	247	49 Serpent.	H & S. 221	16 4	14 1 N	41 57	*np*, *sf*	4.215	Binary; mean mot. + 0°.510.
1826	1	347		S. Re-exam.	.....	....	48 10	*np*	3.501	Epoch 1825.41.
1824	3	248	σ Coron. Bor.	H & S. 222	16 8	34 20 N	18 27	*nf*	1.455	Binary; mean mot. + 2.13, much accelerated and Dist. diminished.
1826	1	348	..... A and B	S. Re-exam.	.....	....	12 29	*nf*	1.480	Epochs 1825.44 and 1825.49
.....	..	350	..... A and C	.....	.....	....	0 39	*sf*	42.175	Epoch 1825.53.
1824	3	252	υ Coron. Bor. 1 and 2	H & S. 223	16 10	29 36 N	65 33	*nf*	.1 28.694	
.....	..	.....	..... 1 and 3	.....	.....	....	35 9	*nf*	.2 6.420	
1824	3	254	20 σ Scorpii	H & S. 224	16 10	25 9 S	1 11	*np*	20.595	
1824	3	255	V. 134	H & S. 225	16 10	19 36 S	64 58	*np*	47.120	Unchanged in Distance.
1824	3	256	V. 124	H & S. 226	16 10	19 40 S	69 29	*nf*	13.280	Slightly changed.
1824	3	257	γ Herculis	H & S. 227	16 14	19 35 N	26 14	*sp*	38.325	
1824	3	259	g 5 Ophiuchi	H & S. 228	16 15	23 1 S	87 30	*nf*	4.065	
1826	1	201	II. 88	S. 677	16 15	14 15 N	48 23	*np*	6.770	No material change.
1826	1	202	23 Herculis	S. 678	16 16	32 45 N	69 38	*nf*	36.844	Sir W. H's. Pos. = 54° 6′ *sp*; it cannot be the same star.
1824	3	260	H. C. 78	H & S. 229	16 18	37 27 N	76 21	*np*	10.155	
1824	3	261	III. 102	H & S. 230	16 21	11 1 N	71 26	*nf*	14.833	
1824	3	261	71 Bode Hercul.	H & S. 231	16 21	18 47 N	19 12	*sf*	3.236	
1824	3	262	II. 23	H & S. 232	16 23	5 51 N	51 7	*np*	7.649	Probably changed in Pos.
1824	3	263	H. C. 228	H & S. 233	16 23	8 42 N	17 29	*nf*	59.544	
1824	3	263	36 Hercul.	H & S. 234	16 32	4 33 N	39 37	*sp*	.1 8.839	

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					h. m.	′	° ′		′ ″	
1824	3	265	17 Dracon.....	H & S.236	16 32	53 17 N	25 26	*sf*	.... 4.512	Unchanged.
1826	1	202	Nova.....	S.....679	16 32	23 23 N	1 5	*sf*	... 17.034	
1824	3	264	V. 127; 1 and 2....	H & S.235	16 34	6 57 N	21 0	*np*	... 54.307	
.....	..	....	.....1 and 3.....	.....	.....	....	74 10	*sp*	.1 30.275	
1824	3	267	ζ Herculis.....	H & S.237	16 35	31 56 N	.....	..	Single.	
1826	1	351	.....	S. Re-exam.	.....	....	.....	..	Single.	1825.57.
1824	3	267	H. C. 369.....	H&S 238	16 35	24 0N	21 27	*np*	.... 6.755	
1826	1	203	Nova.....	S....680	16 35	13 58 N	65 36	*np*	... 13.929	
1824	3	268	43 Herculis.....	H&S 239	16 37	8 55 N	39 9	*sp*	.1 20.094	
1826	1	203	46 Herculis.....	S....681	16 38	28 42 N	73 51	*sf*	.... 5.391	No certainty in Pos.; but increased in
1824	3	412	19 Ophiuchi.....	H&S 378	16 38	2 24 N	10 ±	*sf*	10″ or 15″	[Distance.
1826	1	206	Nova; A and B....	S....682	16 39	30 18 N	59 42	*sf*	... 14.761	
.....	..	..	..... A and C....	.....	.....	.....	50 27	*sf*	.1 4.299	
.....	..	..	..... A and D....	.....	....	.....	76 15	*nf*	.1 min. ±	
1826	1	207	Nova.....	S....683	16 42	36 15 N	69 30	*nf*	.... 7.158	
1824	3	269	P. XVI. 236.....	H&S 240	16 46	19 15 S	42 44	*sp*	.... 5.641	
1824	3	269	H. C. 510.....	H&S 241	16 53	47 36 N	6 3	*np*	.1 55.126	
1824	3	271	21 μ Draconis.....	H&S 242	17 3	54 43 N	61 39	*sp, nf*	.... 3.907	Binary; mean mot. —0°.5792.
1826	1	352	.....	S. Re-exam.	....	.....	61 2	*sp, nf*	.... 4.330	Epochs 1825.52 and 1825.47.
1826	1	208	Nova.....	S....684	17 3	30 37 N	89 10	*sf*	... 24.499	
1824	3	272	36 Ophiuchi 1 and 2	H&S 243	17 4	26 18 S	42 41	*sp, nf*	.... 5.546	
.....	..	..	..... 1 and 3	.....	....	.....	19 5	*np*	Distance	Inaccurate from erroneous micrometrical
1826	1	353	.....A and B....	S. Re-exam.	....	.....	41 32	*sp*	.... 5.200	Epochs 1824.86 and 1825.17. [reading.
.....	..	354	.....A and C....	.....	....	.....	16 1	*np*	.3 15.252	Epoch 1825.27.
.....	..	355	.....B and C....	.....	....	.....	17 41	*np*	.3 13.689	Epoch 1825.53.
1824	3	274	α Herculis.....	H&S 244	17 6	14 36 N	29 33	*sf*	.... 5.286	Unchanged.
1826	1	208	38 Ophiuchi.....	S....685	17 6	26 25 S	60 50	*np*	.... 7.137	Pos. unaltered; Dist. increased 3″, if the
1824	3	275	39 ο Ophiuchi.....	H&S 245	17 7	24 5 S	85 47	*np*	... 12.512	Unchanged in Pos. [same star.
1824	3	276	δ Herculis.....	H&S 246	17 8	25 3N	82 10	*sf*	... 28.869	Altered + 9° 42′ in Pos. and — 5″.349 in
1826	1	364	.....	S. Re-exam.	....	.....	83 33	*sf*	... 26.694	Epoch 1825.50. [Dist.
1824	3	277	ρ Serp. Ophiuch.....	H&S 247	17 11	12 39 S	59 13	*nf*	... 50.213	
1826	1	210	Nova.....	S....686	17 11	28 57 N	85 31	*nf*	... 54.982	
1826	1	210	70 Herculis.....	S....687	17 13	24 41 N	33 26	*nf*	.3 38.339	
1824	3	277	β Herculis.....	H&S 248	17 17	37 19 N	37 53	*np*	.... 4.403	Pos. changed 7° 32′; Dist. + 1″.494.
1826	1	211	Nova.....	S....688	17 18	37 8N	76 13	*nf*	... 33.348	
1826	1	211	Nova.....	S....689	17 19	39 25 N	71 39	*sp*	.1 29.272	
1826	1	212	Nova.....	S....690	17 23	35 5 N	39 25	*sf*	... 10.799	
1824	3	278	53 Ophiuchi.....	H&S 249	17 26	9 43 N	78 41	*sp*	... 41.662	Unchanged in Pos.
1824	3	279	ρ Draconis.....	H&S 250	17 29	55 19 N	42 23	*np, sf*	.1 2.242	Unchanged in Pos.
1824	3	280	254 Bode Oph. 1 & 2	H&S 251	17 30	2 8N	58 7	*np*	.1 51.213	
.....	..	..	.....1 and 3	.....	....	.....	68 37	*nf*	.2 18.090	
.....	..	..	.....2 and 3	.....	....	.....	27 23	*nf*	.1 54.310	
1826	1	213	III. 104. A and B...	S....691	17 32	24 30 N	81 2	*nf*	... 17.214	Change in Pos. + 2° 46′ and + 2″.881 in
.....	..	..	..... A and C....	.....	....	.....	71 50	*sf*	.2 28.267	[Dist.
1824	3	281	61 Ophiuchi.....	H&S 252	17 36	2 41 N	3 33	*sf*	... 20.520	Unchanged.
1824	3	283	H. C. 348.....	H&S 253	17 36	13 14 S	66 48	*sp*	... 15.869	
1826	1	214	Nova.....	S....692	17 38	31 14 N	65 33	*np*	.... 5.029	
1826	1	214	μ Herculis.....	S....693	17 39	27 50 N	29 14	*sp*	... 29.297	Probably unchanged.
1826	1	215	295 Bode Oph.....	S....694	17 43	1 10 N	32 6	*sp*	.1 22.681	
1826	1	216	Nova.....	S....695	17 43	25 19 N	54 30	*sf*	.... 6.768	
1824	3	284	ψ Draconis.....	H&S 254	17 45	72 14 N	75 14	*nf*	... 31.777	
1826	1	216	Nova.....	S....696	17 51	6 51 S	77 45	*np*	.... 8.396	
1824	3	285	67 Ophiuchi.....	H&S 255	17 52	2 57 N	53 4	*sf*	... 55.228	
1824	3	286	H. C. 168.....	H&S 256	17 52	30 5 N	8 53	*np*	... 20.181	
1824	3	412	145.40.....	H&S 379	17 52	22 58 S	61 45	*sp*	... 10.952	
1824	3	287	95 Herculis.....	H&S 257	17 54	21 36 N	8 8	*nf*	.... 6.623	
1826	1	217	II. 90.....	S....697	17 54	26 33 N	71 46	*sf*	.... 7.503	Perhaps slight change in Pos.

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					h. m.	° ′	° ′		′ ″	
1826	1	217	Nova	S....698	17 54	22 30 S	47 27	*np*	... 30.922	
1824	3	288	70 *p* Ophiuchi	H&S 258	17 56	2 33 N	64 48	*sf*	.... 4.266	Binary; mean mot. —6°.811; not uniform.
1826	1	365		S. Re-exam.	....	.....	58 3	*sf*	.... 4.765	Epoch 1825 56.
1826	1	218	Nova	S....699	17 56	25 23 N	53 17	*sp*	... 18.744	
1824	3	292	H. C. 362	H&S 259	17 57	64 9 N	15 27	*np*	.... 21.093	
1824	3	293	III. 56	H&S 260	17 57	12 0 N	12 21	*sp*	.... 6.748	Scarcely altered.
1826	1	219	Nova	S....700	18 0	16 43 S	84 38	*np*	... 28.969	
1824	3	294	73 *g* Ophiuchi	H&S 261	18 1	3 57 N	12 23	*sp*	.... 1.989	Distance increased.
1824	3	296	100 Herculis	H&S 262	18 1	26 5 N	87 35	*nf, sp*	... 14.281	
1824	3	296	Nova	H&S 263	18 7	18 49 S	77 52	*nf*	... 54.302	
1824	3	297	Struve, 569	H&S 264	18 8	18 38 S	37 22	*nf*	... 16.419	
1824	3	298	I. 86	H&S 265	18 12	25 28 N	82 48	*np*	.... 4.587	
1824	3	299	H. C. 298	H&S 266	18 12	15 10 S	51 37	*sp, nf*	... 14.091	
1824	3	299	40 Cephi. or Drac.	H&S 267	18 13	71 58 N	34 56	*sp*	... 21.362	Unchanged.
1826	1	219	H. C. 474	S....701	18 15	6 41 S	71 0	*sp*	.... 6.761	
1824	3	301	59 *d* Serpent.	H&S 268	18 18	0 5 N	48 5	*np*	.... 4.151	Binary?
1826	1	371		S. Re-exam	....	.....	48 34	*np*	.... 4.465	Epoch 1825.54.
1826	1	220	Nova	S....702	18 20	19 13 N	76 51	*sp, nf*	.... 6.288	
1824	3	303	39 Dracon. 1 and 2.	H&S 269	18 21	58 42 N	86 5	*nf*	.... 3.599	Binary? mean mot. —0°.205.
....	..	..	..... 1 and 3.	.....	....	.....	68 5	*nf*	. 1 30.201	
1826	1	372	..... 1 and 2.	S. Re-exam.	....	.....	84 40	*nf*	.... 3.593	} Epoch 1825.55.
1826	1	373	..... 1 and 3.	.....	....	.....	68 36	*nf*	. 1 28.939	}
1826	1	220	Nova	S....703	18 25	32 8 N	66 9	*sp*	.... 6.433	
1824	3	305	H. C. 300	H&S 270	18 30	52 13 N	4 34	*np*	... 26.226	
1824	3	305	H. C. 294	H&S 271	18 30	41 7 N	70 15	*np*	.... 6.000	
1824	3	307	*a* Lyræ	H&S 272	18 31	38 37 N	42 7	*sf*	... 42.108	Changed in Pos. and Dist. by proper mot^{s}.
1826	1	374		S. Re-exam.	....	.....	43 30	*sf*	... 41.563	Epoch 1825.56.
1826	1	221	H. C. 87	S....704	18 32	9 33 N	1 4	*sp*	... 57.657	
1824	3	309	IV. 94	H&S 273	18 36	34 32 N	5 51	*nf*	... 24.630	
1824	3	310	H. C. 296	H&S 274	18 36	10 39 S	66 18	*np*	.... 5.306	
1824	3	310	5 Aquilæ	H&S 275	18 37	1 9 S	32 42	*sf*	... 14.468	
1824	3	311	4, *e* Lyræ	H&S 276	18 38	39 27 N	64 7	*nf*	.... 4.010	Binary? mean mot. —0°.19.
1824	3	313	inter *e* and 5 Lyræ	H&S 277	18 38	39 27 N	50 ±	....	...53 ±	
1824	3	314	5 Lyræ	H&S 278	18 38	39 27 N	69 56	*np, sf*	.... 3.801	Binary; mean mot. —0°.325.
1826	1	375		S. Re-exam.	....	.....	69 11	*np, sf*	.... 3.340	Epoch 1825.53.
1824	3	315	ζ Lyræ	H&S 279	18 38	37 25 N	59 51	*sf*	.... 44.240	
1826	1	221	Nova	S....705	18 39	34 22 N	68 12	*sf*	.... 4.492	
1824	3	317	H. C. 170	H&S 280	18 42	10 47 N	85 28	*sp*	.... 4.794	
1826	1	222	√ Lyræ	S....706	18 42	32 37 N	33 58	*sf*	... 59.840	Change of Pos. = + 5° 21′.
1824	3	317	β Lyræ	H&S 281	18 43	33 10 N	60 1	*sf*	.... 45.778	
1824	3	318	H. C. 19?	H&S 282	18 48	33 46 N	80 15	*np*	... 46.035	
1824	3	319	θ Serpentis	H&S 283	18 48	3 58 N	14 26	*sf*	... 21.679	
1824	3	320	*o* Draconis	H&S 284	18 49	59 10 N	79 11	*np*	... 29.949	
1826	1	223	11 Aquilæ	S....707	18 51	13 23 N	29 28	*sp*	... 19.658	No material change.
1826	1	224	II. 93	S....708	18 52	14 41 N	18 19	*np*	.... 6.677	Unchanged.
1826	1	225	I. 58	S....709	18 52	36 11 N	20 21	*np*	.... 5.478	Pos. changed 7° 21′; ann. mot. + 0°.173.
1824	3	321	P. XVIII. 274	H&S 285	18 54	0 58 S	58 49	*sf*	... 26.019	
1824	3	322	15 Aquilæ	H&S 286	18 56	4 17 S	63 16	*sp*	... 35.619	
1826	1	226	Nova	S....710	18 57	16 33 S	85 25	*nf*	.... 7.054	
1826	1	226	Nova	S....711	18 57	27 4 S	34 32	*sf*	... 45.108	
1824	3	323	III. 109	H&S 287	18 58	6 53 N	22 14	*np*	.... 8.521	
1826	1	227	I. 59	S....712	18 58	35 32 N	76 34	*sp*	.... 2.700	Unchanged.
1826	1	228	233 Bode Dracon.	S....713	18 59	75 33 N	52 16	*sp*	.... 6.549	
1824	3	324	H. C. 19?	H&S 288	19 2	34 18 N	10 27	*sp*	... 17.124	
1826	1	229	Nova	S....714	19 2	34 28 N	1 49	*np*	... 13.063	
1824	3	325	Prec. *u* Lyræ	H&S 289	19 6	38 44 N	32 18	*nf*	... 40.391	
1824	3	325	6 Bode Cygni	H&S 290	19 7	49 31 N	44 6	*sp*	... 10.576	

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					h. m.	° ′	°		′ ″	
1824	3	326	ν Lyræ	H&S 291	19 8	38 51 N	5 58	*nf*	... 29.336	
1826	1	229	Nova	S....715	19 8	16 15 S	74 33	*nf*	.... 9.176	
1826	1	230	Nova	S....716	19 8	16 14 S	70 51	*sp*	.... 6.286	
1824	3	327	θ Lyræ	H&S 292	19 10	37 49 N	17 52	*nf*	.1 41.665	
1824	3	328	H. C. 90	H&S 293	19 11	5 16 N	87 46	*np*	... 31.420	
1826	1	231	28 Aquilæ	S....717	19 11	12 1 N	85 6	*sf*	... 59.280	Sir W. H. has no measures of this star.
1824	3	329	H. C. 111	H&S 294	19 18	9 54 S	35 49	*sf*	... 11.314	
1824	3	330	III. 57	H&S 295	19 19	20 46 N	63 26	*np, sf*	.... 6.938	Changed + 4° 50′ in Pos.; Dist. unaltered.
1824	3	331	II. 69	H&S 296	19 21	36 10 N	23 16	*nf, sp*	.... 7.430	Changed + 5° 56′ in Pos.
1824	3	332	β Cygni	H&S 297	19 24	27 35 N	35 15	*nf*	... 34.383	Unchanged.
1826	1	231	II. 99	S....718	19 25	27 54 N	85 38	*nf*	.... 6.840	Probably unchanged.
1826	1	232	Nova A and B	S....719	19 25	36 21 N	33 27	*nf*	.... 6.295	
1826	1	233	.....A and C	.....	.....	.....	24 46	*nf*	... 53.228	
1826	1	233	I. 13	S....720	19 27	10 33 S	46 3	*np*	.... 4.488	Probably annual motion = + 0°.148.
1826	1	234	ε Sagittæ	S....721	19 29	16 4 N	8 57	*nf*	.1 31.913	Unchanged.
1826	1	235	H. C. 116	S....722	19 29	17 19 S	32 45	*sp*	... 10.669	
1824	3	334	151 Bode Aquilæ	H&S 298	19 34	8 43 S	56 34	*sf*	.1 37.112	
1826	1	236	I. 91	S....723	19 36	10 21 N	6 27	*np*	.... 3.994	Probably a slow change of Pos.
1824	3	335	16 Cygni	H&S 299	19 37	50 6 N	45 13	*np, sf*	... 37.504	Probably unchanged.
1824	3	336	Struve, 634	H&S 300	19 38	33 14 N	56 15	*np*	.....	
1824	3	336	Nova 1 and 2	H&S 301	19 38	33 14 N	15 56	*nf*	... 25.871	
....	..	...	..... 1 and 3	.....	.....	.....	57 35	*sf*	.....	
1824	3	337	Struve, 635	H&S 302	19 38	77 52 N	68 30	*nf*	... 11.936	
1824	3	338	Struve, 636 1 and 2	H&S 303	19 38	35 39 N	36 52	*sf*	... 15.133	
....	..	...	.....1 and 3	.....	.....	.....	18 5	*sp*	.2 19.831	
1826	1	236	Nova	S....724	19 39	20 30 N	6 34	*sp*	.... 5.122	
1824	3	339	δ Cygni	H&S 304	19 39	44 42 N	Single.	....	.....	
1826	1	376	.....	S. Re-exam.	.....	.....	Single.	....	.....	1825.
1826	1	237	V. 137	S....725	19 39	34 37 N	60 49	*nf*	... 38.745	No material change.
1824	3	339	χ Cygni	H&S 305	19 40	33 20 N	16 42	*sf*	.... 25.503	Probably unchanged.
1826	1	238	Nova	S....726	19 40	32 27 N	63 30	*sp*	... 33.444	have been 35°.27′ *sf*. (S.)
1824	3	340	ω Aquilæ	H&S 306	19 41	11 22 N	45 27	*sf*	.... 1.957	Micrometer read off incorrectly; should
1826	1	377	.....	S. Re-exam.	.....	.....	33 27	*sf*	.... 1.549	Epoch 1825.61. Unchanged.
1824	3	340	ζ Sagittæ	H&S 307	19 41	18 43 N	44 32	*np*	.... 8.818	Binary? mean motion.
1824	3	342	α Aquilæ	H&S 308	19 42	8 24 N	55 48	*np*	.2 33.375	Common proper motion.
1826	1	238	II. 95	S....727	19 43	0 2 N	26 42	*np*	.... 5.587	No sensible variation.
1826	1	239	III. 112	S....728	19 43	43 55 N	70 23	*sf*	... 10.415	Unchanged.
1824	3	343	57 Aquilæ	H&S 309	19 45	8 42 S	81 8	*sf*	... 36.158	
1824	3	344	Struve, 647	H&S 310	19 45	19 53 N	58 30	*np, sf*	... 42.427	
1824	3	345	ι Draconis	H&S 311	19 49	69 48 N	85 21	*np*	.... 2.590	Probably unchanged.
1824	3	346	↓ Cygni	H&S 312	19 51	51 58 N	88 0	*sp*	.... 4.321	Pos. unchanged.
1826	1	240	Nova; A and B	S....729	19 52	35 3 N	25 47	*np*	.... 4.318	
....	..	...	..... A and C	.....	.....	.....	34 12	*sp*	.4 2.884	
1826	1	241	*nf* χ Sagittæ	S....730	19 52	17 7 N	74 10	*nf*	.1 55.931	
1826	1	241	Nova	S....731	19 53	46 5 N	63 24	*sp, nf*	.... 5.992	
1824	3	348	I. 96 1 and 2	H&S 313	19 56	35 32 N	86 52	*sf*	.... 2.467	Hardly changed in Pos.
....	..	...	.... 1 and 3	.....	.....	.....	59 29	*np*	.... 41.335	Hardly changed in Pos.
1824	3	349	H. C. 16; 1 and 2	H&S 314	20 0	35 18 N	30 58	*np*	... 10.793	
....	..	...	..... 1 and 3	.....	.....	.....	61 48	*nf*	... 36.523	
1824	3	351	Nova	H&S 315	20 0	35 17 N	33 26	*sp*	.... 20.164	
1824	3	352	Nova	H&S 316	20 0	35 7 N	54 3	*np*	.1 9.479	
1826	1	243	Nova	S....732	20 0	20 36 N	71 0	*np*	.... 4.518	
1826	1	243	Nova	S....733	20 2	34 57 N	32 48	*np*	.... 5.355	
1826	1	244	II. 70	S....734	20 2	16 16 N	75 24	*nf*	.... 6.605	Probably unchanged.
1826	1	244	V. 136	S....735	20 2	0 40 S	67 43	*sp*	... 54.670	Unchanged.
1826	1	245	θ Sagittæ A and B	S....736	20 2	20 22 N	57 58	*np*	... 11 777	Distance unchanged. Posit. not given by
....	..	246	.....A and C	.....	.....	.....	43 11	*sp*	.1 10.088	[Sir W. H.
1826	1	247	Nova	S....737	20 2	20 25 N	39 24	*sf*	.1 41.069	
1824	3	353	II. 96	H&S 317	20 3	0 19 N	61 48	*sp*	.... 4.100	Perhaps a slow change in Pos.

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					h. m.	° ′ N	° ′		″	
1826	1	247	H. C. 297	S....738	20 4	33 7 N	22 15	*sf*	... 41.862	
1826	1	248	Nova	S....739	20 5	6 33 S	39 26	*nf*	... 25.116	
1826	1	248	P. XX. 43, 44	S....740	20 5	6 4 N	77 11	*sp, nf*	... 43.893	
1824	3	354	H. C. 182	H&S 318	20 6	4 2 S	36 33	*sp*	... 14.491	
1826	1	249	Nova; A and B	S....741	20 7	21 45 N	86 13	*nf*	.... 6.439	
.....	..	..	..... A and C..	.....	....	.....	60 12	*sf*	... 57.325	
1824	3	355	α Capricorni	H & S 319	20 8	13 3 S	21 26	*np*	.6 12.999	
1826	1	250	o^2 Cygni	S....742	20 8	46 12 N	83 53	*sf*	.1 46.393	Pos. changed 8° 53′.
1824	3	413	σ Capricorni	H & S 380	20 9	19 40 S	86 27	*sf*	... 53.704	
1826	1	251	32 Cygni	S....743	20 10	47 10 N	85 34	*sf*	.3 28.496	
1826	1	251	Nova	S....744	20 11	12 28 N	52 51	*np*	... 28.383	
1826	1	252	β Capricorni A and B	S....745	20 11	15 21 S	2 54	*sp*	.3 23.715	} No measures given by Sir W. H.
.....	..	..	..... A and C	.....	.....	.....	43 40	*sf*	.3 46.716	
1826	1	253	H. C. 240	S....746	20 12	45 4 N	43 28	*sp*	.... 8.915	
1824	3	355	I. 95	H & S 320	20 14	54 48 N	69 39	*np*	.... 3.980	
1826	1	258	Nova; A and B	S....747	20 14	15 50 N	61 40	*sf*	... 30.745	
.....	..	259	..... B and C.....	.....	....	.....	17 ±	*nf*	....13 ±	Each by estimation.
1824	3	356	κ Cephei	H & S 321	20 15	77 10 N	38 4	*sf*	.... 8.138	Distance increased 3″.
1826	1	379	.....	S. Re-exam.	....	.....	36 24	*sf*	.... 7.871	Epoch 1825.67.
1826	1	254	H. C. 176	S....748	20 18	13 44 S	23 25	*nf*	... 23 803	
1826	1	255	P. XX. 140	S....749	20 18	2 42 S	80 35	*sp*	... 59.872	
1824	3	358	ζ Capricorni. VI. 29.	H & S 322	20 19	18 24 S	60 45	*sf*	.3 58.021	
.....	..	359	..... II. 51..	H & S 323	20 20	18 24 S	87 17	*sf*	.... 4.026	
1824	3	361	ο 12 Capricorni	H & S 324	20 20	19 10 S	30 17	*sp*	... 22.060	
1826	1	255	Nova	S....750	20 22	25 48 N	54 13	*np*	.1 6.711	
1826	1	256	15 Bode Delphin	S....751	20 22	10 45 N	13 35	*nf*	... 14.689	Pos. changed 3° 53′; Dist. increased 2″.6.
1826	1	256	H. C. 537	S....752	20 22	18 48 N	18 38	*np*	.1 45.377	
1826	1	257	37 Bode Cephei	S....753	20 22	56 3 N	29 38	*sf*	... 26.446	
1824	3	362	H. C. 109	H & S 325	20 23	10 35 N	14 22	*sp*	... 15.484	
1826	1	258	Nova	S....754	20 23	25 53 N	31 14	*np*	... 25.674	
1826	1	258	210 Bode Cygni	S....755	20 25	48 37 N	8 49	*np*	.1 1.387	
1826	1	259	ω^3 Cygni	S....756	20 26	48 37 N	49 1	*np*	... 55.791	
1826	1	260	Nova	S....757	20 26	27 31 N	31 33	*np*	.... 4.468	
1826	1	261	H. C. 114	S....758	20 27	13 21 S	73 49	*sp*	... 10.256	
1826	1	261	IV. 92; A and B	S....759	20 28	14 8 N	19 58	*sf*	... 25.083	Unchanged.
.....	..	262	.....A and C	.....	....	.....	52 55	*sp*	... 54.299	
1824	3	362	Nova	H & S 326	20 32	38 5 N	88 43	*np*	.... 9.478	
1826	1	262	H. C. 106	S....760	20 34	12 6 N	3 0	*nf, sp*	.... 9.194	
1826	1	263	Nova	S....761	20 37	23 17 N	61 56	*np*	.... 2.049	
1826	1	263	52 Cygni	S....762	20 37	30 4 N	32 40	*nf*	.... 7.202	Unchanged.
1824	3	363	γ Delphini 1 and 2	H & S 327	20 38	15 29 N	3 43	*np*	... 12.317	
.....	..	..	.....1 and 3..	.....	....	.....	78 35	*nf*	.2 20.857	
1826	1	264	H. C. 177	S....763	20 38	18 51 S	25 6	*np*	... 16.749	
1826	1	264	II. 66	S....764	20 38	15 14 N	84 59	*np*	.... 4.979	Change of Pos. 6° 17′.
1826	1	266	λ Cygni	S....765	20 40	35 50 N	14 29	*sf*	.1 25.590	Unchanged.
1826	1	266	Nova	S....766	20 42	5 46 N	69 31	*np*	.... 3.998	
1826	1	267	II. 100	S....767	20 43	51 17 N	15 24	*nf*	.... 4.409	Unchanged.
1826	1	268	P. XX. 355	S....768	20 44	6 40 N	54 44	*sf*	... 40.598	
1824	3	364	ι Equulei	H & S 328	20 50	3 36 N	10 39	*nf*	... 12.374	
1826	1	268	Nova	S....769	20 50	15 47 N	14 2	*sp*	... 14.987	
1826	1	269	280 Bode Cygni	S....770	20 53	49 46 N	57 9	*nf*	... 2.449	Pos. changed — 10° 45′.
1826	1	270	Nova	S....771	20 55	6 30 S	78 20	*sp*	.... 3.227	
1826	1	271	Nova	S....772	20 56	2 51 N	59 31	*sf*	.... 3.613	
1826	1	272	Struve, 704	S....773	20 57	34 44 N	59 54	*nf*	.1 23.249	
1824	3	365	61 Cygni	H&S 329	20 59	37 52 N	5 19	*nf*	... 15.425	Binary; mean mot. + 0°. 730.
1826	1	381	.....	S. Re-exam.	....	.....	3 4	*nf*	... 15.444	Epoch 1825.70.
1826	1	272	Nova	S....774	20 59	33 26 N	47 9	*sp*	... 14.324	
1826	1	273	II. 97	S....775	21 1	29 29 N	45 12	*np*	.... 3.576	Unaltered.

Vol. for	Part.	Page.	Star's Name, &c.	Observer and Number.	R. A.	Decl.	Position.	Quadrant.	Distance.	Remarks.
					h. m.	° ′	° ′		′ ″	
1826	1	273	STRUVE, 709.....	S....776	21 2	21 43 N	30 53	*np*	... 17.685	
1826	1	274	1789.213	S....777	21 2	61 26 N	32 31	*np*	... 6.825	
1826	1	275	Nova	S....778	21 2	8 50 N	5 55	*sp, nf*	.... 3.087	
1826	1	276	STRUVE, 710	S....779	21 2	38 1 N	79 15	*nf*	.1 54.785	
1826	1	276	Nova	S....780	21 2	19 16 N	58 20	*nf, sp*	.... 2.933	
1826	1	277	19 BODE Equulei ...	S....781	21 4	6 28 N	82 58	*np*	.3 3.241	
1826	1	278	δ Equulei.....	S....782	21 6	9 17 N	48 3	*nf*	... 26.240	Annual mot. = — 0°838 in Pos. & +0″.154 in Dist.
1826	1	279	H. C. 197	S....783	21 7	8 23 S	82 22	*sf*	.... 4.837	
1826	1	280	Nova	S....784	21 11	8 48 N	84 53	*sp*	.... 2.642	
1826	1	281	STRUVE, 718.....	S....785	21 13	52 15 N	26 33	*sf, np*	.... 6.641	
1826	1	281	327 BODE Cygni ...	S....786	21 13	52 19 N	32 22	*np*	... 48.739	
1826	1	282	1 Pegasi.....	S....787	21 14	19 3 N	40 11	*np*	... 36.861	No notable change.
1826	1	283	H. C. 197	S....788	21 14	7 20 S	6 30	*nf*	... 36.784	
1826	1	283	Nova	S....789	21 18	12 56 N	56 29	*sf*	.... 3.480	
1826	1	284	69 Cygni.....	S....790	21 18	35 33 N	11 22	*sp*	.... 40.305	
1826	1	284	Nova	S....791	21 20	10 19 N	68 5	*np, sf*	.... 1.195	
1826	1	285	Nova	S....792	21 24	33 2 N	79 23	*sp, nf*	.... 4.321	
1826	1	285	Nova	S....793	21 25	19 56 N	41 40	*np*	.... 2.580	
1824	3	369	β Cephei	H&S 330	21 26	69 46 N	19 35	*sp*	... 13.163	
1824	3	370	3 Pegasi.....	H&S 331	21 28	5 48 N	78 58	*np*	... 39.525	Perhaps a very slow change of Pos.
1826	1	286	Nova	S....794	21 31	35 32 N	72 3	*sf*	.... 8.172	
1826	1	287	III. 71..... A and B.	S....795	21 33	56 41 N	31 33	*sf*	... 11.945	Change of Pos. —3° 51′, of Dist. +0″.3.
.....	..	..	..... A and C	.....	....	.....	69 3	*np*	... 19.383	Ch. of Pos. — 4°.54 & +0″.77 in Dist.
1826	1	288	76 Cygni.....	S....796	21 34	39 59 N	40 52	*sp*	.1 5.645	Sir W. H. has no measures of this star.
1826	1	288	III. 72	S....797	21 35	56 46 N	33 35	*nf*	... 12.150	
1826	1	289	ι Pegasi	S....798	21 35	9 3 N	52 59	*np*	.2 18.514	Pos. unchanged.
1824	3	370	μ Cygni ....1 and 2	H&S 332	21 36	27 56 N	23 4	*sf*	... 5.744	
.....	..	..	.....1 and 3	.....	....	.....	28 43	*nf*	.3 37.401	
1826	1	289	79 Cygni; A and B..	S....799	21 36	37 29 N	30 39	*nf*	.2 33.170	
.....	..	290	..... A and C ..	.....	....	.....	50 8	*np*	2½ min. ±	
1824	3	373	145.74?.....	H&S 333	21 46	18 55 N	20 15	*sf*	... 22.052	
1824	3	374	145.57.....	H&S 334	21 46	54 59 N	76 11	*sp*	.... 20.308	
1824	3	375	III. 74	H&S 335	21 49	5 6 N	33 29	*nf*	.. 10.093	Diminished in Distance.
1824	3	375	Near III. 74	H&S 336	21 49	5 6 N	44 0	*sp*	.1 45.858	
1826	1	290	1789.213	S....800	21 49	61 45 N	55 21	*sf*	.1 2.836	
1826	1	291	H. C. 571	S....801	21 52	12 51 S	30 4	*sf*	... 20.453	
1826	1	291	29 Aquarii.....	S....802	21 53	17 49 S	26 38	*sp*	... 4.370	
1826	1	292	Nova.....	S....803	21 57	12 48 N	7 9	*sp, nf*	.... 3.288	
1824	3	376	ξ Cephei.....	H&S 337	21 58	63 45 N	23 15	*np*	.... 5.817	
1826	1	292	1789.218	S....804	22 0	69 20 N	83 43	*sf*	... 16.606	
1826	1	293	Nova	S....805	22 0	36 45 N	22 40	*nf*	... 12.774	
1824	3	376	P. XXII. 11.12	H&S 338	22 3	58 25 N	45 13	*np*	... 22.094	
1824	3	377	145.56	H&S 339	22 4	21 53 S	30 42	*sf*	.... 5.170	
1826	1	293	180 BODE Cephei...	S....806	22 4	81 58 N	12 8	*nf*	... 13.567	
1826	1	294	Nova	S....807	22 6	28 41 N	21 15	*sf*	.... 1.794	
1824	3	378	145.120	H&S 340	22 7	69 17 N	15 31	*sp*	... 14.839	
1824	3	378	1 Lacertæ	H&S 341	22 8	36 51 N	78 43	*sp*	... 15.619	
1826	1	382	.....	S. Re-exam.	....	.....	77 11	*sp*	... 15.732	Epoch 1824.84.
1824	3	379	33 Pegasi.....	H&S 342	22 15	19 56 N	75 45	*np*	... 56.045	
1824	3	380	STRUVE, 751.....	H&S 343	22 16	65 50 N	2 37	*sf*	.... 2.723	
1826	1	295	Nova	S....808	22 16	21 5 S	64 35	*sf*	.... 6.457	
1824	3	381	145.64.....	H&S 344	22 17	44 27 N	0 5	*nf*	.... 4.238	
1824	3	382	53 Aquarii.....	H&S 345	22 17	17 39 S	3 7	*np*	... 10.032	
1824	3	383	ζ Aquarii.....	H&S 346	22 20	0 57 S	89 29	*sp*	.... 4.989	Binary; mean mot. —0°.4484.
1826	1	383	.....	S. Re-exam.	....	.....	88 56	*nf*	.... 4.014	Epoch 1825.73.

Vol. for	Part.	Page.	Star's Name, &c.	Observer and Number.	R. A.	Decl.	Position.	Quadrant.	Distance.	Remarks.
					h. m.	° ′	° ′		′ ″	
1824	3	385	∂ Cephei	H&S 347	22 23	57 30 N	78 44	*sp*	... 41.612	
1826	1	295	Nova	S....809	22 24	6 31 N	79 41	*np, sf*	... 12.897	
1826	1	296	H. C. 108	S....810	22 25	3 19 N	55 35	*sf*	... 14.062	
1824	3	386	8 Lacertæ 1 and 2....	H&S 348	22 28	38 42 N	85 39	*sp*	... 22.674	
.....	..	..	..... 1 and 3....	.....	....	.....	55 15	*sf*	1 22.520	
1826	1	296	STRUVE, 758.....	S....811	22 29	37 57 N	67 26	*np*	... 21.175	
1826	1	297	H. C. 181	S....812	22 30	13 28 S	56 46	*sf, np*	.... 6.011	
1826	1	297	10 Lacertæ	S....813	22 31	38 7 N	41 19	*nf*	.1 0.444	No material change.
1826	1	298	Nova	S....814	22 33	29 7 N	9 42	*np, sf*	... 18.522	
1826	1	299	12 Lacertæ	S....815	22 33	39 17 N	73 28	*nf*	.1 12.073	Unaltered.
1824	3	387	213 BODE Aquar. ...	H&S 349	22 34	9 11 S	51 19	*np*	.... 3.398	
1826	1	299	α Pegasi	S....816	22 35	29 17 N	68 56	*np*	.1 29.823	Sir W. H. has no measures of this star.
1826	1	300	τ^1 Aquarii	S....817	22 38	15 0 S	22 47	*sf*	... 30.536	Diff. of Pos. 2° 53′; dimin. of Dist. 5″.1.
1824	3	388	231 BODE Aquar. 1 & 2	H&S 350	22 39	5 9 S	24 24	*sp*	.... 4.349	
.....	..	..	..... 1 and 3	.....	....	.....	72 33	*sf*	... 57.381	
1826	1	301	τ^2 Aquarii	S....818	22 40	14 33 S	22 24	*np*	.2 13.438	Pos. changed 3° 54′.
1826	1	301	Nova	S....819	22 41	30 23 N	20 31	*np, sf*	.... 3.712	
1826	1	302	1789.219	S....820	22 42	71 56 N	9 21	*np*	.2 0.895	
1824	3	389	16 Lacertæ	H&S 351	22 48	40 39 N	44 41	*nf*	.1 4.541	
1826	1	303	Nova	S....821	22 50	26 49 N	82 11	*nf*	.... 6.850	
1826	1	303	Nova	S....822	22 57	32 26 N	70 48	*sf*	.... 3.434	
1824	3	390	P. XXII. 306	H&S 352	22 59	31 51 N	58 19	*sf*	.... 8.716	
1824	3	391	H. C. 242	H&S 353	23 2	46 59 N	17 0	*sp*	... 14.709	
1826	1	304	2 Cassiopeiæ	S....823	23 2	58 21 N	73 20	*sf*	.2 46.683	Sir W. H. gives no measures of this star.
1826	1	304	H. C. 191	S....824	23 2	12 54 S	12 41	*sf*	.... 4.207	
1826	1	305	Nova	S....825	23 2	35 55 N	49 58	*np*	.1 5.331	
1826	1	305	H. C. 191; A and B..	S....826	23 5	9 52 S	86 10	*sf*	... 26.276	
.....	..	..	.....A and C...	.....	.....	.....	19 10	*sf*	.2 38.168	
1826	1	306	ψ^1 Aquarii.....	S....827	23 6	10 4 S	41 8	*np*	... 49.835	Probably not Sir W. H's. star.
1824	3	392	94 Aquarii.....	H&S 354	23 10	14 26 S	76 41	*np*	... 14.998	
1826	1	307	Nova	S....828	23 13	34 29 N	86 13	*sp*	.... 5.117	
1826	1	308	P. XXIII. 69.....	S....829	23 14	9 27 S	4 4	*np*	.... 7.981	
1826	1	308	α Piscium.....	S....830	23 18	0 16 N	74 56	*np*	.2 30.090	Sir W. H. has no measures of this star.
1826	1	308	STRUVE, 783.....	S....831	23 21	4 17 N	84 1	*sp*	... 11.681	
1824	3	393	Anonyma.....	H&S 355	23 22	57 32 N	0 0	*p*	.1 13.953	
1826	1	309	II. 94 or Nova?	S....832	23 23	42 50 N	41 52	*np*	.... 4.389	Pos. changed probably 6° 42′, if II. 94.
1826	1	310	H. C. 128.....	S....833	23 32	5 17 N	41 34	*np*	.. 14.575	
1824	3	393	107 Aquarii.....	H&S 356	23 37	19 41 N	53 30	*sf*	.... 5.056	
1826	1	310	IV. 107	S....834	23 38	27 28 N	53 31	*nf*	... 32.248	Differs 3° 10′ from Sir W. H's. Pos.
1826	1	311	20 Piscium	S....835	23 39	3 46 S	17 13	*np*	.2 50.924	
1824	3	394	28 BODE Andr. 1 & 2	H&S 357	23 43	36 54 N	0 17	*sp, nf*	.... 5.011	
.....	..	..	.....1 and 3	.....	....	.....	45 25	*sf*	.3 45.941	
1824	3	395	.....	H&S 358	23 46	30 52 N	59 11	*np*	... 41.297	
1826	1	311	Nova	S....836	23 49	23 22 N	44 38	*np*	.... 9.301	
1824	3	396	σ Cassiopeiæ	H&S 359	23 50	54 45 N	57 41	*np*	.... 2.924	Doubtful if changed or not.
1824	3	397	37 BODE Androm. ..	H&S 360	23 51	32 43 N	81 38	*sp*	.... 5.263	
1826	1	312	STRUVE, 794.....	S....837	23 54	65 6 N	19 24	*nf*	... 15.427	
1826	1	312	9 Cassiopeiæ	S....838	23 55	61 17 N	74 23	*sp*	.4 5.423	Manifestly not Sir W. H's. star.

JAMES SOUTH.

Sloane Street, No. 132,
April 12th, 1826.

A careful revision of the former communication on Double Stars, Phil. Trans. 1824. iii. has led to the detection (among several errata of trifling importance), to the following of a graver character, which the reader of that paper is earnestly requested to correct in his Copy.

Page, &c.	Error.	Correction.
124	Mean 54 Cancri	Near 54 Cancri
216	48.845	40.845
325	4.13	44.6
337	97.60	107.60
337 twice and in Index, Star No. 301	23.467	25.871
338	$Z = + 1.44$	$Z = - 1.44$
355	$Z = - 0.12$	$Z = + 0.12$
167 and in Index No. 144	73° 50′	72° 50′
	73 54	72 54
	73 52	72 52
101 and in Index No. 79	16″.988	15′.966
323 twice and in Index No. 287	67° 46′	22° 14′
Index No. 105	9 42	9 12
Index No. 110 in Column of Decl.	12 17	17 12
Index No. 278	278	*278
Index No. 222	Mean mot. — 2°.13	Mean mot. + 2°.13

Errata to be corrected in the present Memoir.

Page 209, *for* " between 36 and 38," *read* north following 36.
—— 353, *for* " 1825.252," *read* 1825.52.
—— vi. (Index) H. and S. 74; *for* + 0°.009," *read* + 0°.109.
—— viii. (Index) S. 600; Re-exam. add in col. of Remarks, the word " Binary."

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